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NAVY MESS MANAGEMENT SPECIALIST TRAINING:
OPINION SURVEYS AND INTERVIEWS

by

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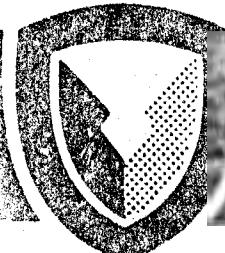
and

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AUGUST 1977

U.S. ARMY
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Food Sciences Laboratory

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Navy enlisted food service personnel (MS) were surveyed and interviewed as the medium for obtaining data concerning present MS training programs and possibilities for omissions/additions to the curriculum. Strikers, cooks, watch captains, and their supervisors in the fleet; school students, school instructors, and food management team members were all sampled. The major questions in all surveys and interviews were directed toward the quality and quantity of training.			

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All groups surveyed unanimously agreed that "A" School hands-on training was too short. Data concerning the Coast Guard food service training program indicated that increases in hands-on training lead to improved performance in initial assignments. The survey and interview data also implied that more stress should be placed on portion control in "A" School and menu planning training should be expanded in the "C" Management School. General agreement existed that major efforts should be directed toward the coordination and direction of the sanitation program by watch captains, and especially, by leading MS's. Most groups agreed that customer relations training should be expanded in both "A" and "C" Food Production Schools. Concern was expressed about the present status in the fleet of preventive maintenance of food service equipment. Leadership/supervision was cited as the major MS problem in the fleet by many school instructors and food management team members. Strong support was voiced for increasing attendance at both "C" Schools. Similar agreement existed concerning the strengthening of the OJT program in the fleet.

Several additional recommendations for Navy MS training are made based on the views of the various MS groups surveyed and interviewed.

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PREFACE

The Navy has tasked the Operations Research and Systems Analysis (OR/SA) Office of the U.S. Army Natick Research and Development Command (NARADCOM), formerly U.S. Army Natick Development Center (NDC) to investigate methods currently employed for selecting, training and motivating Navy personnel in food service and to evaluate the effectiveness of these methods. The Behavioral Sciences Division (BSD) of the Food Sciences Laboratory (FSL) of NARADCOM was requested to undertake the behavioral aspects of this project as part of the Department of Defense (DoD) Food RDT&Eng Program under Task BF of Project Number 1T762724AH99, Methods, Techniques, and Measures of Effectiveness in Evaluating Feeding Systems. The Service Requirement was USN 5-1, Evaluation of Training Methods for Military Food Service Systems.

The authors would like to acknowledge the high level of cooperation extended by the U.S. Navy in this effort. Thanks are addressed to the Navy Food Service Systems Office; the Navy Mess Management Specialist School at the Naval Training Center, San Diego; the Navy Food Management Teams; Naval Surface Forces, U.S. Pacific Fleet; Naval Surface Forces, U.S. Atlantic Fleet; and all of the ships surveyed. Particular appreciation is extended to the individual Navy Mess Management Specialists who were the respondents to the surveys and interviews used in the project.

We would like to thank Mr. Theodore T. Mattus, Jr. of the OR/SA office, NARADCOM who assisted in administering surveys, Dr. D. Paul Leitch of the same organization for this thoughtful comments, and Mr. Paul Short of the same organization who reviewed the manuscript. We also express our appreciation to Ms. Anne Martin and Ms. Marjorie Berman of BSD, FSL, NARADCOM who performed the major portion of the data reduction, Ms. Nancy Cobean and Mr. Peter Priore of the same organization for computer assistance, and CPT Eugene T. Chao of the same organization who reviewed the manuscript.

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TABLE OF CONTENTS

	Page
PREFACE	1
LIST OF TABLES	7
INTRODUCTION	11
METHOD	11
Fleet Surveys for Cooks/Strikers and Watch Captains	11
Fleet Surveys for Supervisors	14
School Student Surveys	15
School Instructor Surveys and Interviews	15
Food Management Team Surveys and Interviews	15
DEMOGRAPHICS OF THE FLEET SAMPLE	16
COOKING	17
Importance and Status in the Fleet	17
"A" School Training	21
Cooking	21
Food service equipment	21
Progressive cookery	26
Amount and type of hands-on training	26
Size of A School laboratory working groups	28
"C" Food Production School Training	28
Cooking	28
Food service equipment	31
Progressive cookery	31
BAKING	31
"A" School Training	31
"C" Food Production School Training	34
OTHER CULINARY TASKS	38
Garnishing	38
"A" School training	38
"C" Food Production School training	39
Preparation of Sauces, Gravies and Soups	39
"A" School training	39
"C" Food Production School training	39
Cake Decoration	39
"A" School training	39
"C" Food Production School training	40

TABLE OF CONTENTS (cont'd)

	Page
RECIPE CONVERSION AND PORTION CONTROL	40
Recipe Conversion	40
"A" School training	40
"C" Food Production School training	41
Portion Control	41
NUTRITION AND MENU PLANNING	41
Nutrition	41
"A" School training	41
"C" Food Production School training	41
Menu Planning	42
"A" School training	42
"C" Food Production School training	42
"C" Management School training	42
MOTIVATION	42
WORK SCHEDULING	45
"C" Food Production School Training	45
"C" Management School Training	45
SANITATION	45
Importance and Status in the Fleet	45
"A" School Training	46
"C" Food Production School Training	50
Sanitation in General	50
WARDROOM/HOUSEKEEPING	53
"A" School Training	53
"C" Food Production School Training	54
SUPPLY	56
"A" School Training	56
"C" Food Production School Training	56
CUSTOMER RELATIONS	57
Importance and Status in the Fleet	57
"A" School Training	57
"C" Food Production School Training	57

TABLE OF CONTENTS (cont'd)

	Page
PREVENTIVE MAINTENANCE	58
Importance and Status in the Fleet	58
"A" School Training	58
"C" Food Production School Training	59
SAFETY	59
Importance and Status in the Fleet	59
"A" School Training	59
"C" Food Production School Training	59
RECORDS AND RETURNS	60
"A" School Training	60
"C" Food Production School Training	61
"C" Management School Training	61
SUPERVISION/LEADERSHIP	61
Importance and Status in the Fleet	61
"C" Food Production School Training	62
"C" Management School Training	62
TRAINING	63
On-the job Training (OJT)	63
Training at Different Grade Levels	64
Short and Long Food Service Courses	64
Food Management Team Follow-up Visits	66
SUMMARY	68
Cooking	68
Baking	69
Other Culinary Tasks	70
Recipe Conversion and Portion Control	70
Nutrition and Menu Planning	71
Motivation	71
Work Scheduling	71
Sanitation	71
Wardroom/Housekeeping	72
Supply	73
Customer Relations	73
Preventive Maintenance	73
Safety	74
Records and Returns	74
Supervision/Leadership	74
Training	75

TABLE OF CONTENTS (cont'd)

	Page
RECOMMENDATIONS	76
REFERENCES	81
APPENDICES: SURVEYS AND INTERVIEW FORMS	
A. US Navy Training Attitude Survey (Cooks and Strikers)	83
B. US Navy Training Attitude Survey (Watch Captains)	99
C. Supervisor Evaluation of Navy Food Service "A" School	115
D. U.S. Navy Training Attitude Survey("A"School Students)	124
E. U.S. Navy Training Attitude Survey("C"School Students)	136
F. Food Service Instructor Interview	149
G. Instructor Interview - 2	155
H. Food Management Team Interview	159
I. Food Management Team Interview - 2	165

LIST OF TABLES

	Page
Table 1. Number of Opinion Surveys Conducted in the Fleet by Ships.	12
Table 2. Number of Opinion Surveys Conducted in the Fleet by Ship Class.	13
Table 3. Like/Dislike of Navy by Fleet Sample: Percent of Responses.	17
Table 4. Probability of Reenlistment of Fleet Sample: Percent of Responses.	18
Table 5. Mean Food Management Team Ratings of the Importance of Thirteen Factors in the Success of a Food Service Operation.	19
Table 6. Mean Food Management Team Ratings of the Present Status of Thirteen Food Service Factors in the Fleet.	20
Table 7. Mean Student Ratings of the Quality of "A" School Training: Cooking.	22
Table 8. Mean Graduate Ratings of the Quality and Quantity of "A" School Training: Cooking.	23
Table 9. Mean Supervisor Ratings of the Quality and Quantity of "A" School Training: Cooking.	24
Table 10. Mean Food Management Team and Food Service School Instructor Ratings of How Well "A" School Prepares Graduates.	25
Table 11. Percent of Responses of "A" School Instructors and Food Management Team Members Concerning the Length of "A" School Cooking Laboratory.	27
Table 12. Responses to the Question: "Should "A" School Students, with Instructors as Supervisors, be Placed in an Actual Galley?"	29
Table 13. Mean Responses to the Question: "How often do "A" School Students 'Coast Through' Labs in Groups?"	29
Table 14. Mean Student Ratings of the Quality and Quantity of "C" Food Production School Training: Cooking.	30

LIST OF TABLES (cont'd)

	Page
Table 15. Mean Graduate Ratings of the Quality and Quantity of "C" Food Production School Training: Cooking.	32
Table 16. Mean Food Management Team and Food Service School Instructor Ratings of How Well "C" Food Production School Prepares Graduates.	33
Table 17. Mean Student Ratings of the Quality of "A" School Training: Baking.	35
Table 18. Mean Graduate Ratings of the Quality and Quantity of "A" School Training: Baking.	35
Table 19. Mean Supervisor Ratings of the Quality and Quantity of "A" School Training: Baking.	36
Table 20. Mean Student Ratings of the Quality and Quantity of "C" Food Production School Training: Baking.	37
Table 21. Mean Graduate Ratings of the Quality and Quantity of "C" Food Production School Training: Baking.	38
Table 22. Mean Food Management Team and Food Service School Instructor Ratings of How Well "C" Food Management School Prepares Graduates.	43
Table 23. Mean Responses on Patchen's (1965) Job Motivation Indices.	44
Table 24. Mean Student Ratings of the Quality of "A" School Training: Sanitation.	47
Table 25. Mean Graduate Ratings of the Quality and Quantity of "A" School Training: Sanitation.	48
Table 26. Mean Supervisor Ratings of the Quality and Quantity of "A" School Training: Sanitation.	49
Table 27. Mean Student Ratings of the Quality and Quantity of "C" Food Production School Training: Sanitation.	51

LIST OF TABLES (cont'd)

	Page
Table 28. Mean Graduate Ratings of the Quality and Quantity of "C" Food Production School Training: Sanitation	52
Table 29. Mean Student Ratings of the Quality of "A" School Training: Wardroom.	54
Table 30. Mean Student Ratings of the Quality and Quantity of "C" Food Production School Training: Wardroom.	55
Table 31. Mean Graduate Ratings of the Quality and Quantity of "C" Food Production School Training: Wardroom.	55
Table 32. Percent of Responses to the Question: "What one Level of Personnel Requires More or Extra Training?"	65
Table 33. Percent of Responses to the Question: "Which Group of MS's is Best Trained?"	65
Table 34. Mean Responses Concerning Civilian Food Service Courses as Part of a Navy MS Career.	66
Table 35. Percent of Responses Concerning Civilian Food Service Courses as Part of a Navy MS Career.	67

NAVY MESS MANAGEMENT SPECIALIST TRAINING: OPINION SURVEYS AND INTERVIEWS

INTRODUCTION

The US Navy Food Service Systems office has requested the US Army Natick Research and Development Command (NARADCOM) to evaluate and make recommendations concerning the training of the Navy enlisted food service worker (MS). For this project NARADCOM's Behavioral Sciences Division has used the food service worker himself as the medium for obtaining data concerning the present food service training program and possibilities for exclusions/additions. This report will cover the data obtained in the two initial years of the project, data centering on the Food Service "A" and "C" Food Production School Courses and related on-the-job training (OJT). The report is organized with a method section, demographics, results from the entire data base organized by subject area, an overall summary, and recommendations.

METHOD

The evaluation of the training process can take many forms including measurement of work output, supervisors' ratings, performance ratings, work sampling, job knowledge testings, and opinion surveys. The Navy mess specialty involves an extremely large number of complex tasks, many of these unique to single individuals in a given work shift or even on a given ship. Mainly for this reason, the latter two methods, both of which are not task specific, were used in the project. This report examines the survey and interview responses generated by striker's, cooks, watch captains and their supervisors in the fleet; school students, school instructors, and food management team members. For a discussion of the job knowledge testing approach see Stein et al., 1976.¹

Fleet Surveys for Cooks/Strikers and Watch Captains.

The fleet surveys and interviews were carried out on board ship in both the Atlantic and Pacific fleets. Every available Mess Management Specialist (MS) on board, except for the leading chief, was requested for the sample. This included two major classes of workers: cooks/strikers and watch captains (the equivalent of a shift leader). In an attempt to obtain a representative sample three groups of ships were sampled in each fleet in June 1975: destroyer size (DD, DE, and DDG), mid-size (LPD, LPH, LSD, and LKA), and aircraft carriers (see Table 1 for a complete list of ships sampled). As can be seen in Table 2, each size class was fairly equally represented in the total sample. Mainly because more ships were represented in the destroyer class sample, a higher percentage of watch captains were surveyed/tested in that sub-group.

¹Stein, E. S., Symington, L. E., and Meiselman, H. L. Job knowledge testing as an intermediate criterion of performance: A study of Navy cooks. Technical Report 76-40-FSL, Food Sciences Laboratory, US Army Natick Research and Development Command, 1976 (ADA026968).

NAVAL MANPOWER MANAGEMENT SPECIALIST TRAINING
OPINION SURVEY DATA

TABLE 1

Number of Opinion Surveys Conducted in the Fleet by Ships

SHIP	Cook/ Striker Surveys	Watch Captain Surveys	Supervisor Surveys
East Coast:			
USS America (CVA-66)	58	10	4
USS Ponce (LPD-15)	18	4	1
USS Guam (LPH-9)	21	6	2
USS Charleston (LKA-113)	11	7	1
USS Hawkins (DD-873)	10	4	2
USS Sherman (DD-931)	3	4	2
USS Turner (DLG-20)	12	4	2
USS Byrd (DLG-23)	10	5	1
West Coast:			
USS Ranger (CVA-61)	39	5	2
USS Cleveland (LPD-7)	8	2	0
USS Juneau (LPD-10)	8	2	2
USS Tripoli (LPH-10)	22	3	0
USS Ft. Fisher (LSD-40)	9	1	0
USS Towers (DDG-9)	8	3	1
USS Berkeley (DDG-15)	6	3	1
USS McLain (DDG-36)	5	3	2
USS Stein (DE-1065)	8	4	0
USS Shields (DE-1066)	3	5	1
USS Agerholm (DD-826)	6	2	1
USS Hull (DD-945)	7	3	2

TABLE 2
Number of Opinion Surveys Conducted in the Fleet by Ship Class

	Cook/ Striker Surveys	Watch Captain Surveys	Total Surveys
Destroyer Class	78	40	118
Mid-Size Ships	97	25	122
Aircraft Carriers	97	15	112
Totals	272	80	352

A job knowledge test (JKT) and opinion survey were administered, one after the other, to the MS in the fleet. In order to minimize the impact of the survey/test sessions on the food service mission, survey/testing time was restricted to two hours, and sessions were given twice for each ship. Most respondents were surveyed/tested just before or after their work shift. The JKT was given a one-hour time limit, and the respondents were allowed the remaining time to complete the opinion surveys (most requiring 30 to 40 minutes to complete the latter). In order to control for possible fatigue or transfer effects, the order of administration was counterbalanced so that approximately half of the respondents on each ship filled out the JKT first, and half, the opinion survey first. In those instances where the opinion survey was given first, completion was also self-paced. Regardless of which presentation order was to be used, the respondents received the two instruments (the JKT and the opinion survey) at the start of the testing/survey session. A short oral briefing covering both instruments was given at the start of the session. In addition, detailed written instructions were provided in the test and survey materials. At least one administrator was always present to monitor the session and answer questions.

The tests and surveys were administered aboard ship or in shore classrooms depending on the preference of the various supply or food service officers involved. Most of the testing in San Diego was carried out aboard ship, while most in Norfolk was ashore. The classroom settings provided good workspace, lighting, and noise conditions. Conditions aboard ship (usually the wardroom or the eating area of the galley being used as the testing location) were more variable in terms of administration environment, with the noise level and frequency of interruption varying from ship to ship. Respondents seemed able to adjust, however, and appeared to perform the requested tasks without much of a problem.

The fleet surveys were constructed with the aim of using the MS actually working in the fleet as a source of training information. Since one would anticipate different training experiences for watch captains than for cooks and strikers, two separate testing instruments were devised (see Appendices A and B respectively.) The two instruments had several common questions. Personnel were asked to provide demographic information which might be anticipated to influence attitude in general, and, therefore, attitudes toward training. Other questions addressed to all respondents, covered such areas as job satisfaction, incentives for a Navy food service career, "A" and "C" Food Production School characteristics (laboratory space and time, etc.) and motivation.

The two major questions in each survey were oriented around the quality and quantity of training. The cooks/strikers were first asked to rate how good or bad their training was on a seven-point scale in 41 different categories. This rating was to be based on how good the training they received was in preparing them for the job they performed in the fleet. "A" School graduates were asked to rate the quality of training in each category for both their "A" School course and on-the-job training (OJT). Non-"A" School graduates rated only the categories for the OJT they had received. It was emphasized in both verbal and written instructions that OJT referred to a formal program, not just learning from watching someone else. However, post-survey interviews with several respondents clearly indicated a failure to make this distinction. Therefore, the OJT responses are not discussed in this report.

All respondents were also asked about the amount of training they had received in the same 41 categories; ("much too much" to "much too little" on a seven-point scale). "A" School graduates answered this question for their "A" School training only, and the nongraduates answered for OJT only. In both questions, all respondents could indicate that they had received no training in a given category. The categories chosen for both the quality and quantity questions were a combination of topics listed in the "A" School curriculum and categories suggested by such experts as food management team members as being areas in which a cook or striker should be trained.

The watch captains were given the same two basic questions, but with 42 different categories compiled in the same manner as for the cooks and strikers. Responses were given on similar seven-point scales by "C" School Food Production graduates and nongraduates with their answers being oriented toward "C" School and/or watch captain OJT. For the same reason cited above, OJT results will not be discussed.

Fleet Surveys for Supervisors.

A third survey administered in the fleet was oriented toward the supervisors--the leading MS's (Appendix C). Twenty-seven supervisors were asked to rate the same 41 categories as the cooks/strikers, but were requested to respond on a seven-point scale with their opinion, based on worker performance, of how good or bad "A" School training was for graduates who worked or had worked for them in the fleet. They were asked

to rate the amount of training in each category in the "A" School on the same basis. A third question asked supervisors whether the typical "A" School graduate was better, worse, or about the same as the nongraduate in ten general categories.

School Student Surveys.

Surveys were also administered to students in their last week of formal training in the "A" School (88 respondents--three graduating classes) and in the "C" Food Production School (34 respondents--two graduating classes). Both groups of students were asked questions about satisfaction, incentives, school facilities, the instructors, and how time was allocated in their courses. The "A" School students' main question centered around how well or poorly 76 categories were covered in their instruction (see Appendix D). The categories were generated in the same manner as those for the fleet surveys and were broken down into finer detail. The "C" Food Production School students were asked a similar question for 61 different categories (see Appendix E), but since they had prior experience in the fleet they were also asked to comment on the amount of training in each category relative to their future jobs as watch captains.

School Instructor Surveys and Interviews.

Thirty two instructors from the Mess Management Specialist Schools, Naval Training Center, San Diego were surveyed and interviewed concerning their opinions of the three formal courses offered at the school. Surveys and interviews were administered on a one-to-one basis in a quiet classroom in the school with the written survey (see Appendix F) always preceding the interview (see Appendix G). The main question in the survey centered around the quality and quantity of training, although the categories in this survey were fewer in number and more general than those presented to fleet personnel. The interview questions allowed for open-ended expansion of views on the quality and quantity of training and also addressed such categories as laboratory time, civilian and military short courses, etc. In both the survey and interview, some general questions were addressed to all instructors. Questions concerning each individual course were asked only of those instructors who had actually worked in the course. Specifically then, 31 instructors responded to questions concerning "A" School, 14 to questions concerning "C" Food Production School, and 17 to questions about "C" Management School.

Food Management Team Surveys and Interviews.*

Surveys and interviews similar to those given the instructors were administered to a total of 24 food management team members from the San Diego (9), Norfolk (8),

*The five Navy Food management teams are made up of highly qualified senior enlisted MS personnel who conduct training assistance visits to ships/facilities in their respective geographic areas.

Charleston (4) and Mayport (3) food management teams.* Each available team member (some were working at ships/facilities geographically removed from their home bases) answered questions centering around the quality and quantity of both formal and on-the-job training. In addition, each team member rated the importance and present status in the fleet of 13 major components of the food service system. See Appendices H and I for copies of the survey and interview forms.

As with the instructors, the survey was always administered before the interview in a one-on-one session. Administration conditions were varied with some sessions being conducted in the food management team offices and others in a relatively quiet corner of the mess decks on board the ships that team members were visiting. Most team members answered all questions, although one felt unqualified to answer questions about "A" School, six didn't answer about "C" Food Production School, and seven didn't respond about "C" Management School.

DEMOGRAPHICS OF THE FLEET SAMPLE

Before interpreting the survey and interview results which bear directly on training, some of the demographic results from the cook/striker and watch captain surveys in the fleet should be discussed briefly. As mentioned above, the total number of fleet surveys administered was 352. In the following discussion and tables, variation from that number reflects nonresponses to specific questions.

The fleet sample seems reasonably representative of working level MS's. There were 4 E-1's, 65 E-2's, 95 E-3's, 87 E-4's, 58 E-5's, and 43 E-6's surveyed. Their ages ranged from 18 to 50 with 18% of the sample being under 20 years of age, 54% between 20 and 29 years old, 23% between 30 and 39 and 5% being 40 years old or older. Their amount of time spent in Navy food service also seems reasonably distributed, with 17% reporting having served less than a year, 17% reporting 12 to 23 months of service, 24% reporting 2 to 4 years of service, 18% reporting 5 to 9 years of service, 14% reporting 10 to 14 years of service, 10% reporting 15 to 19 years of service and less than 1% (3 MS's) reporting more than 20 years of service.

The "average" MS filling out the survey was just to the "like slightly" side of "neither like nor dislike" in terms of his attitude toward the Navy (see Table 3). As might be expected, the attitude toward the Navy in the fleet sample appears to be positively related to grade.

*The Pearl Harbor team was not surveyed/interviewed because of the high costs which would have been incurred.

TABLE 3
Like/Dislike of Navy by Fleet Sample: Percentage of Response

	E-1&2 (N=69)	E-3 (N=93)	E-4 (N=87)	E-5 (N=58)	E-6 (N=43)	Total
7. Like very much	6%	9%	10%	22%	35%	14%
6. Like moderately	9%	12%	24%	29%	28%	19%
5. Like a little	12%	12%	2%	16%	2%	9%
4. Neither like nor dislike	21%	21%	44%	20%	19%	26%
3. Dislike a little	12%	5%	2%	2%	7%	5%
2. Dislike moderately	10%	14%	7%	2%	7%	9%
1. Dislike very much	30%	27%	11%	9%	2%	18%
Mean	3.23	3.47	4.31	5.10	5.35	4.13

A similar relationship exists between grade and the perceived probability of reinlisting (Table 4). Again the mean response was just to the negative side of the neutral point on the response scale.

COOKING

Importance and Status in the Fleet.

Food management team members evaluated the importance of the skill level of cooks along with twelve other factors in terms of how they influence the success of a food service operation (Table 5). The mean rating for this factor was 3.68 on a five-point scale, between "important" and "very important". To put this rating in perspective, however, it ranked twelfth out of thirteen categories considered for importance by the teams. This low ranking is somewhat disturbing in that it seems almost incontrovertible that cooking ability must somehow play a critical role in an organization whose main function is providing acceptable meals.

TABLE 4

Probability of Reenlistment of Fleet Sample: Percentage response

	E-1&2 (N=69)	E-3 (N=94)	E-4 (N=87)	E-5 (N=58)	E-6 (N=43)	Total (N=351)
No, I will retire	0%	0%	1%	21%	33%	8%
1. Definitely No	51%	35%	28%	2%	0%	26%
2. Probably No	9%	12%	6%	5%	2%	7%
3. Not certain	32%	31%	16%	14%	7%	22%
4. Probably Yes	4%	14%	26%	28%	21%	18%
5. Definitely Yes	4%	8%	23%	30%	37%	19%
Mean excluding "No, I will retire" responses.	2.03	2.49	3.12	4.02	4.38	2.94

The skill level of the cooks was rated by team members between "neither good nor bad" and "slightly good" (a mean of 4.60 on a seven-point scale) in terms of its present status in the fleet (Table 6). This was the highest ranking mean given the 13 categories rated by the food management teams. Behavioral Sciences Division (BSD), NARADCOM has, over the years, collected a great deal of formal data concerning consumers' opinions of military food service (including Navy food service). The single most serious complaint stated by the consumers in almost every instance concerned food quality and/or variety. This was true of the Navy shore facility surveyed (Siebold, et al., 1975);² however, it should not be assumed that this facility is representative of the entire Navy. Interviews recently conducted aboard two aircraft carriers by BSD indicated that consumers viewed the quality of food to be poor in one instance and neither poor nor good (neutral) in the other. Again, these perceptions are hardly conclusive evidence of a food quality problem in the Navy, but taken together with the NAS Alameda data are suggestive of a possible difference between the consumer and food management team view of the food and the cooking skills of the MS rating.

²Siebold, J. R., Symington, L. E., Meiselman, H. L., and Rogozenski, J. E. Consumers and workers opinions of a proposed cash food system: NAS Alameda. Technical Report 76-9-FSL, Food Sciences Laboratory, U.S. Army Natick Development Center, 1975 (AD A018 108).

TABLE 5

**Mean Food Management Team Ratings of the Importance of Thirteen
Factors in the Success of a Food Service Operation**

Factor	Mean
1. Leadership of middle level and senior MSs	4.92
2. Sanitary conditions in the galley and dining area	4.80
3.5. The condition of equipment or utensils	4.72
3.5. Level of customer satisfaction	4.72
5. Interest and support of the Commanding Officer	4.56
6. A safety program	4.52
7. Interest and support of the Supply Officer	4.48
8. Quality of the Mess Deck Master at Arms	4.36
9. Support and cooperation of fellow MSs on board	4.20
10. An OJT program	4.12
11. Quality of messmen	3.92
12. The skill level of cooks	3.68
13. Food Service Officer experience or education	3.36

Scale: 1 – Slightly important; 2 – Somewhat important; 3 – Fairly important; 4 – Very important; 5 – Extremely important.

TABLE 6

Mean Food Management Team Ratings of the Present Status of
Thirteen Food Service Factors in the Fleet

Factor	Mean
1. The skill level of cooks	4.60
2. Interest and support of the Commanding Officer	4.56
3. Level of customer satisfaction	4.44
4. Interest and support of the Supply Officer	4.24
5. Support and cooperation of fellow MSs on board	4.12
6. Food Service Officer experience or education	3.48
7. Leadership of middle level and senior MSs	3.12
8.5. A safety program	3.04
8.5. Quality of messmen	3.04
10. An OJT program	2.84
11. Quality of the Mess Deck Master at Arms	2.76
12. Sanitary conditions in the galley and dining area	2.68
13. The condition of equipment or utensils	2.50

Scale: 1 — Very bad; 2 — Bad; 3 — Slightly bad; 4 — Neither good nor bad; 5 — Slightly good; 6 — Good; 7 — Very good.

"A" School Training.

Cooking. Table 7 shows the mean training quality ratings given various cooking and food service equipment categories by "A" School students. Concentrating for now on the upper portion of the table, which deals with cooking skills, note that the students gave positive mean ratings to these categories with 10 of the 11 mean ratings falling between "slightly well covered" and "well covered". The means, when compared to all 76 categories rated by the students, ranged from 16.5 to 56, neither the highest nor lowest categories rated.

Table 8 shows the mean ratings given by "A" School graduates for similar "A" School cooking training categories. While the mean ratings (4.48 to 4.74 on a seven-point scale, between "neither bad nor good" and "slightly good") were lower than those given by the students, the ranks of the means are quite similar. In terms of amount of training, the graduates rated these categories as falling between "a bit too little" and "just about right" (3.35 to 3.62 on a seven-point scale). In response to a related question, 58% of the nongraduates of "A" School interviewed in the fleet indicated their belief that attending "A" School would have helped them in the meat cookery area.

The supervisors' ratings of their "A" School graduates' training in cooking skill categories were less positive than those of the students and more positive than those of the graduates, on the average (Table 9). Ignoring progressive cookery, which will be discussed below, the ratings fell between "neither bad nor good" and "good". More strikingly, however, note that four of these categories were the highest ranked categories when compared to all 41 categories rated by the supervisors, and the other two ranked 8.5 and eleven. Despite these high rankings, note that the supervisors felt that the amount of training in these areas was between "slightly too little" and "just about right". In addition, supervisors were asked to compare their "A" School graduate workers with nongraduates in meat cookery. Their mean rating, on a seven-point scale, was 3.55, between "just about the same" and "A" School graduates "slightly better".

Food management team members were asked how well "A" School prepares graduates in cooking skills; their mean response was 4.96 on a seven-point scale, "slightly well", ranking third when compared to the other eleven categories rated (Table 10). "A" School instructors gave a higher absolute mean response to the same question (5.77 on a seven-point scale, between "slightly well" and "well"), but the mean ranked 4.5 out of eleven categories, similar to the rank of the mean team member response (Table 10).

Food service equipment. A review of the lower portions of Tables 7, 8, and 9 covering food service equipment shows a similar picture of the ratings of "A" School instruction quality. The students' mean ratings were the highest (between "slightly well" and "well" covered, 5.27 to 5.73 on a seven-point scale); the graduates', next highest (between "neither bad nor good" and "slightly good", 4.63 to 5.01 on a seven-point scale); and the supervisors', the lowest (between "slightly bad" and "slightly good",

TABLE 7

Mean Student Ratings of the Quality of "A" School Training: Cooking

Rank ^a	Category	Mean ^b
16.5	Preparation of salads	5.83
20	Vegetable cookery	5.78
21.5	Preparation of salad dressings	5.75
28.5	Poultry cookery	5.66
31	Fish cookery	5.57
32	Egg cookery	5.55
40	Roasting of meat	5.39
43	Cereal and starch cookery	5.35
49	Grilling of meats	5.24
50	Milk and cheese cookery	5.23
56	Use and preparation of beverages	4.86
22.5	Use of steam-jacketed kettles (coppers)	5.73
40	Use of ovens	5.39
40	Use of electric griddles	5.39
46	Use of deep fat fryers	5.30
47	Use of steamers	5.27

^aRank of the mean out of 76 category means

^bQuality scale: 7 — Very well covered; 6 — Well covered; 5 — Slightly well covered; 4 — Neither well nor poorly covered; 3 — Slightly poorly covered; 2 — Poorly covered; 1 — Very poorly covered.

TABLE 8
Mean Graduate Ratings of the Quality and Quantity of "A" School
Training: Cooking

Quality			Quantity		
Rank ^a	Mean ^b	Category	Rank ^a	Mean ^c	
16	4.74	Grilling meats	10	3.62	
17	= 4.73	Roasting meats	15	3.48	
20	4.64	Poultry cookery	19.5	3.40	
23.5	4.59	Salad and salad dressing preparation	18	3.42	
26	4.57	Cheese and egg cookery	21.5	3.38	
29	4.50	Progressive cookery	30	3.11	
32	4.48	Fish cookery	24	3.35	
10	5.01	Use of deep fat fryers	16.5	3.45	
11	5.00	Use of electric griddles	13.5	3.58	
13	4.88	Use of ovens	19.5	3.40	
15	4.80	Use of steam-jacketed kettles	25.5	3.33	
21	4.63	Use of steamers	35	3.01	

^aRank of mean out of 41 category means

^bQuality scale: 7 -- Very good; 6 -- Good; 5 -- Slightly good; 4 -- Neither bad nor good; 3 -- Slightly bad; 2 -- Bad; 1 -- Very bad.

^cQuantity scale: 7 -- Much too much; 6 -- Too much; 5 -- A bit too much; 4 -- Just about right; 3 -- A bit too little; 2 -- Too little; 1 -- Much too little.

TABLE 9
Mean Supervisor Ratings of the Quality and Quantity of "A"
School Training: Cooking

Rank ^a	Quality		Category	Quantity	
	Rank ^a	Mean ^b		Rank ^a	Mean ^c
1	5.38	Grilling meats	1.5	3.86	
2	5.10	Roasting meats	1.5	3.86	
3	5.00	Poultry cookery	9.5	3.28	
4	4.79	Fish cookery	13	3.21	
8.5	4.31	Cheese and egg cookery	13	3.21	
11	4.21	Salad and salad dressing preparation	13	3.21	
16.5	3.83	Progressive cookery	28.5	2.83	
5	4.69	Use of ovens	4.5	3.66	
6	4.66	Use of deep fat fryers	6	3.62	
7	4.41	Use of electric griddles	3	3.79	
10	4.28	Use of steam-jacketed kettles	15	3.17	
30	3.38	Use of steamers	21	2.97	

^aRank of the mean out of 41 category means.

^bQuality scale: 7 — Very good; 6 — Good; 5 — Slightly good; 4 — Neither bad nor good; 3 — Slightly bad; 2 — Bad; 1 — Very bad.

^cQuantity scale: 7 — Much too much; 6 — Too much; 5 — A bit too much; 4 — Just about right; 3 — Slightly too little; 2 — Too little; 1 — Much too little.

TABLE 10**Mean Food Management Team and Food Service School****Instructor Ratings of How Well "A" School****Prepares Graduates**

Topic	Food Management		School	
	Teams N = 23	Mean	Instructors N = 31	Mean
Recipe conversion	1	5.57	1	6.26
Personal hygiene	2	5.26	4.5	5.77
Cooking	3	4.96	4.5	5.77
Nutrition	4	4.83	6.5	5.48
Use of food service equipment	5	4.68	8	5.29
Customer relations	6	4.52	9	4.87
Safety	7	4.50	6.5	5.48
Storage and breakout	8	4.43	10	4.84
Baking	9	4.35	2	5.97
Sanitation	10	4.22	3	5.90
Preventive maintenance	11	3.26	11	4.45

Scale: 1 – Very poorly; 2 – Poorly; 3 – Slightly poorly; 4 – Neutral;**5 – Slightly well; 6 – Well; 7 – Very well.**

3.38 to 4.69 on a seven-point scale). Note that all three groups of respondents gave training in the use of the steamer the lowest mean rating for pieces of food service equipment. Also notable are the ranks of the supervisors' ratings for equipment training (fifth, sixth, seventh, and tenth out of 41, excluding the steamer). If one combines the supervisors' ranks for cooking skill and food service equipment training, ten of the eleven highest ranking means are included. In terms of the quantity of training, both graduates and supervisors felt that the amount of training fell between "a bit too little" and "just about right" on a seven-point scale.

Food management team members felt that the "A" School trained students between "neither well nor poorly" and "slightly well", (a mean rating of 4.68 on a seven-point scale) in the use of food service equipment (Table 10). "A" School instructors gave a higher mean rating, between "slightly well" and "well" (5.29 on a seven-point scale) to the same category (Table 10).

Progressive cookery. "A" School progressive cookery training was given a mean rating of 4.50 on a seven-point scale, between "neither bad nor good" and "slightly good", by "A" School graduates (Table 8) and 3.83, between "slightly bad" and "neither bad nor good" by their supervisors (Table 9). Both groups concurred that the amount of progressive cookery training was "slightly too little". Supervisors did acknowledge a belief that "A" School graduates were slightly better in their knowledge of progressive cookery than were their nongraduate counterparts.

Amount and type of hands-on training. "A" School students were asked about the adequacy of the length of their cooking laboratory. Their mean response was 2.75 on a seven-point scale, between "too short" and "a bit too short". While their opinion is open to the counter that students just "like" the laboratory better than lectures, senior MS personnel (instructors and food management team members), who are not subject to this counter, also expressed the opinion that the cooking laboratory should be longer (Table 11). As a matter of fact, no one in either group felt it should be shorter, and only 12% and 8%, respectively, thought the one week of cooking laboratory in existence at that time was adequate. When asked in an open-ended question, "What should be added to or taught more in "A" School?", 38% of the food management team members and 74% of the school instructors volunteered cooking laboratory as an answer (38% would generally be considered a "high" frequency for open-ended responses).

A modification of the training program for U.S. Coast Guard Subsistence Specialists (SS), which included an increase in the amount of "hands-on" time was studied as part of this Navy project. The data from the study strongly supported the increase. The galley phase of the course was consistently rated as the best aspect of the training mainly because of its "hands-on" orientation. Graduates of the new course (with increased

TABLE 11

**Percent of Responses of "A" School Instructors and
Food Management Team Members Concerning the
Length of "A" School Cooking Laboratory**

"A" School Students Should Spend:

	7 Much More Time	6 More Time	5 Slightly More Time	4 Just about the Same Time	3 Slightly Less Time	2 Less Time	1 Much Less Time	Means
"A" School Instructors N=32	38%	31%	19%	12%	0	0	0	5.94
Food Manage- ment Team Members N=24	50%	33%	9%	8%	0	0	0	6.25

"hands-on" time) rated the quality of training in food preparation areas higher than did old graduates; and school instructors concurred. Supervisors in the fleet also rated performance of new graduates higher than that of old graduates. Questions asking all respondents to compare the utility of "hands-on" as opposed to classroom training all led to strong preferences for "hands-on". (Nuss, et al., 1976³; Symington, et al., 1978⁴).

³Nuss, E. M., Symington, L. E. and Mattus, T. T. Jr. The impact of a modified training course on performance of U.S. Coast Guard Subsistence Specialists. Technical Report 7T-13-OR/SA, Operations Research/Systems Analysis Office, U.S. Army Natick Research and Development Command, 1976 (AD A032 793).

⁴Symington, L. E., Nuss, E. M. and Stein, E. S. Hands-on experience in military food service training programs. Technical Report (in press), Food Sciences Laboratory, U.S. Army Natick Research and Development Command, 1978.

In addition, mean responses of Navy students, graduates, instructors, and food management team members indicate a preference for "A" School training in an actual galley with instructors as supervisors (Table 12). Note that each group was more positive about galley experience in addition to the laboratory experience, and that food management team members were particularly strong in their opinion favoring actual galley experience. Most instructors and team members, when asked, "Why this preference?", felt that the galley provided exposure to the real job of an MS, while the laboratory, although providing a nice environment for initial learning, was too ideal with regard to equipment repair and lack of time pressure. In the Coast Guard study referred to above, a cooking laboratory experience immediately prior to the training galley was found to have a significant impact on student performance in the training galley, and was specifically cited by students, and instructors as being an ideal medium for initial exposure to cooking.

Size of "A" School laboratory working groups. Food management team members and school instructors were asked whether the practice, at that time, of placing five or six students in a group at a given work station was preferable to individual training. Approximately 70% of each group (71% of team members and 68% of instructors) felt that individual training was preferable, although one-third of each of these subgroups which favored individual training also expressed the opinion that it was impractical given the school facilities and student load. Table 13 shows student and graduate response to a related question concerning the frequency of students "coasting through" the laboratory in these large groups. Mean responses fell between "sometimes" and "often".* Most food management team members and instructors specified the ideal group size for the laboratory as three, with four being an upper limit.

"C" Food Production School Training.

Cooking. The upper portion of Table 14 shows the mean quality and quantity ratings given their cooking skill training "C" Food Production School students. The students gave positive ratings to these cooking skill categories. Their mean responses, when compared to all 61 categories rated, were among neither the highest nor lowest categories rated (other than the 58 rank of salad dressing preparation). In terms of amount of training, three categories were rated as being near "just about right" (egg and egg mixture cookery, cereal and starch cookery, and milk and cheese cookery); the others ranged between "just about right" and "too little".

*Some caution in interpreting this data as strong evidence is advised since "sometimes" is at the midpoint of the scale and many people have a central response tendency.

TABLE 12

Responses to the Question: "Should "A" School Students, with Instructors as Supervisors, be Placed in an Actual Galley?"

	"A" Students Response	"A" Graduates Response	School Instructors Response	Food Management Team Members Response
Instead of School Lab	4.38	5.02	5.03	5.79
In Addition to School Lab	5.16	5.05	5.38	6.25
Response Scale:				
7	6	5	4	3
Much Better	Better	A Bit Better	About the Same	A Bit Worse
				Worse
				Much Worse

TABLE 13

Mean Responses to the Question: "How Often do "A" School Students 'Coast Through' Labs in Groups?"

Respondents	Never	Very Little	Sometimes	Often	Almost Always
"A" Graduates	1	2	3	4	5
"A" Students			3.11		

TABLE 14

**Mean Student Ratings of the Quality and Quantity of
"C" Food Production School Training: Cooking**

Rank ^a	Quality Mean ^b	Category	Quantity	
			Rank ^a	Mean ^c
21.5	5.53	Milk and cheese cookery	23.5	3.79
24	5.49	Egg and egg mixture cookery	19.5	3.94
27	5.41	Cereal and starch cookery	23.5	3.79
30	5.27	Poultry cookery	49	2.76
35	5.17	Fish and shellfish cookery	50.5	2.73
41	5.00	Vegetable cookery	41	2.97
44	4.83	Progressive cookery	47	2.79
46	4.78	Preparation of salads	48	2.77
58	4.44	Preparation of salad dressings	52	2.68
25	5.44	Use of electric griddles	50.5	2.73
29	5.30	Use of ovens	30	3.38
32	5.22	Use of steam-jacketed kettles	43	2.91
41	5.00	Use of deep fat fryers	44.5	2.85
53	4.67	Use of steamers	55	2.64

^aRank of the mean out of 61 category means

^bQuality scale: 7 – Very well covered; 6 – Well covered; 5 – Slightly well covered; 4 – Neither well nor poorly covered; 3 – Slightly poorly covered; 2 – Poorly covered; 1 – Very poorly covered.

^cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

Table 15 shows the mean ratings given by "C" Food Production School graduates for similar cooking training categories. Graduate ratings were even higher than those for students ranging between "slightly good" and "good". Moreover, the graduates disagreed a bit with the students, feeling that the amount of training in these areas was either "just about right" or approaching it.

Food management team members and "C" Food Production School instructors were asked how well the school prepares graduates in cooking skills (Table 16). On a seven-point scale, the mean response of team members to that question was 5.44 (between "slightly well" and "well"), the highest rating given any of the twelve categories evaluated. Instructors gave a virtually identical mean rating, 5.50, although it ranked 7.5 out of twelve categories.

Food service equipment. The lower portion of Table 14 indicates that students rated "C" Food Production School training in the use of food service equipment between "slightly well" and "well" (means ranging from 5.00 to 5.44) with the exception of training in the use of steamers. The ratings for amount of training suggest some feeling for increased training in these categories. Graduates, on the other hand, rated food service equipment training as "good", a mean rating of 6.05 (Table 15); and felt that the amount of such training was "just about right".

Food management team members felt that the "C" Food Production School trained students just short of "slightly well" (a mean rating of 4.89 on a seven-point scale) in the use of food service equipment (Table 16). Instructors gave a higher mean rating (5.64 on a seven-point scale) between "slightly well" and "well" (Table 16).

Progressive cookery. "C" Food Production School training in progressive cookery was given a mean rating approaching "slightly well" (4.83) by students (Table 14). They also felt that the amount of training fell between "slightly too little" and "too little". Graduates gave such training a higher mean rating, 5.79, and felt that the amount of training was near "just about right" (Table 15). Of the watch captains surveyed in the fleet who were not "C" Food Production School graduates, 65% felt that "C" School training in progressive cookery would have been helpful to them. Food management team members (a mean response of 4.78 on a seven-point scale, between "neither well nor poorly" and "slightly well") and instructors (a mean response of 5.64, between "slightly well" and "well") were also positive, on the average, about progressive cookery training in "C" Food Production School (Table 16).

BAKING

"A" School training. All of the surveys/interviews used contained questions concerning training in various aspects of baking. Table 17 shows the mean training quality ratings given various baking and baking equipment categories by "A" School students. Bread and roll baking, cookie preparation, and pie baking training were all rated near "well covered"; pie filling preparation and baking of specialty breads were rated nearer

TABLE 15

Mean Graduate Ratings of the Quality and Quantity of "C" Food Production School Training: Cooking

Quality		Category	Quantity	
Rank ^a	Mean ^b		Rank ^a	Mean ^c
10	6.00	Meat cookery	1.5	4.44
13.5	5.89	Poultry cookery	1.5	4.44
17	5.79	Progressive cookery	22	3.89
20	5.72	Egg and egg mixture cookery	19	3.94
22	5.68	Fish cookery	9.5	4.11
26	5.58	Milk and cheese cookery	22	3.89
34	5.21	Salad and salad dressing preparation	29	3.76
	8.5	Use of cooking equipment	9.5	4.11

^aRank of the mean out of 42 category means^bQuality scale: 7 - Very good; 6 - Good; 5 - Slightly good; 4 - Neither bad nor good; 3 - Slightly bad; 2 - Bad; 1 - Very bad^cQuantity scale: 7 - Much too much; 6 - Too much; 5 - A bit too much; 4 - Just about right; 3 - A bit too little; 2 - Too little; 1 - Much too little.

SUMMARY

Meat cookery was the most highly rated category of food production training. Poultry cookery, progressive cookery, egg and egg mixture cookery, fish cookery, and salad and salad dressing preparation were the next highest rated categories. Milk and cheese cookery was the lowest rated category. The use of cooking equipment was rated as being just about right in quantity.

TABLE 16
Mean Food Management Team and Food Service School Instructor
Ratings of How Well "C" Food Production School
Prepares Graduates

Topic	Food Management		School Instructors	
	Teams N = 18	Mean	Rank	Mean
Cooking	1	5.44	7.5	5.50
Nutrition	2	5.39	1	6.23
Baking	3	5.11	3	6.00
Use of food service equipment	4.5	4.89	6	5.64
Safety	4.5	4.89	10.5	5.36
Progressive cookery	6	4.78	4	5.77
Watch supervision	7	4.72	7.5	5.50
Customer relations	8	4.67	9	5.46
Record keeping	9	4.39	10.5	5.36
Sanitation	10	4.11	2	6.14
How to give OJT	11	3.77	12	4.50
Preventive maintenance	12	3.39	5	5.69

Scale: 1 – Very poorly; 2 – Poorly; 3 – Slightly poorly; 4 – Neutral; 5 – Slightly well; 6 – Well; 7 – Very well.

"slightly well covered"; and cake baking was rated nearer "neither well nor poorly covered". Training in the use of bread-dough mixers was rated lower than that in the use of bake ovens, but still between "neither well nor poorly covered" and "slightly well covered". Students rated the amount of baking laboratory as "a bit too short", a mean rating of 2.92 on a seven-point scale.

As can be seen in Table 18, "A" School graduates rated their training in both cake and pie baking and bread and roll baking between "neither bad nor good" and "slightly good", indicating that the amount of training in each category was, in their judgment, "a bit too little". Graduates' ratings of the training in the use of baking equipment were lower than those of the students; but they concurred with the students in rating training in the use of bake ovens higher than training in the use of bread-dough mixers. Graduates' mean perceptions of the amount of training in the use of baking equipment centered around "a bit too little".

Supervisors in the fleet were more critical of "A" School training in the various baking categories, giving them all mean ratings between "neither bad nor good" and "slightly bad" (Table 19). Note that they rated training in bread and roll baking higher than training in cake and pie baking, and supported the student and graduate opinions that training in the use of bread-dough mixers was worse than training in the use of bake ovens. Supervisor ratings of the amount of "A" School baking training centered around "a bit too little".

Food management team members and "A" School instructors considered how well "A" School prepared graduates in the baking area as a whole (Table 10). The former group was more critical giving "A" School baking training a mean rating of 4.35 on a seven-point scale, between "neither well nor poorly" and "slightly well". The instructors' mean rating was 5.97, approaching "well". This difference in opinion about the quality of "A" School baking training was also reflected in the rankings of the mean baking ratings, second for the instructors, and ninth for the team members out of the eleven areas rated.

"C" Food Production School training. Table 20 shows the mean quality and quantity ratings given various baking training categories by "C" Food Production School students. The ratings were quite high, ranging from 5.42 to 6.61, from between "slightly well covered" and "well covered" to between "well covered" and "very well covered". These ratings rank between second and twenty-sixth when compared among all 61 categories. With the exception of cookie baking, the ratings for amount of training fell between "just about right" and "a bit too much". "C" Food Production School graduates rated more general baking categories, as can be seen in Table 21, and gave them lower mean ratings than the students, but still between "slightly good" and "good" (5.47 to 5.89). Graduates felt that the amount of training in these baking categories fell between "a bit too little" and "just about right".

TABLE 17

Mean Student Ratings of the Quality of "A" School Training: Baking

Rank ^a	Category	Mean ^b
11	Baking of breads and rolls	6.04
15	Preparation of cookies	5.90
16.5	Pie baking	5.83
48	Preparation of pie fillings	5.26
55	Baking of specialty breads	4.89
68.5	Cake baking	4.30
78.5		
42	Use of bake ovens	5.37
60	Use of bread dough mixers	4.67

^aRank of the mean out of 76 category means

^bQuality scale: 7 – Very well covered; 6 – Well covered; 5 – Slightly well covered; 4 – Neither well nor poorly covered; 3 – Slightly poorly covered; 2 – Poorly covered; 1 – Very poorly covered.

TABLE 18

Mean Graduate Ratings of the Quality and Quantity of "A" School Training: Baking

Rank ^a	Quality Mean ^b	Category	Quantity	
			Rank ^a	Mean ^c
34	4.38	Cake and pie baking	31.5	3.10
36	4.27	Bread and roll baking	33.5	3.09
19	4.66	Use of bake ovens	29	3.16
35	4.34	Use of bread-dough mixers	38	2.76

^aRank of the mean out of 41 category means.

^bQuality scale: 7 – Very good; 6 – Good; 5 – Slightly good; 4 – Neither bad nor good; 3 – Slightly bad; 2 – Bad; 1 – Very bad.

^cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

TABLE 19

Mean Supervisor Ratings of the Quality and Quantity of "A" School Training: Baking

Quality			Quantity		
Rank ^a	Mean ^b	Category	Rank ^a	Mean ^c	
15	3.90	Bread and roll baking	28.5	2.83	
33	3.31	Cake and pie baking	34	2.66	
18	3.76	Use of bake ovens	11	3.24	
27	3.45	Use of bread-dough mixers	21	2.97	

^aRank of the mean out of 41 categories

bQuality scale: 7 – Very good; 6 – Good; 5 – Slightly good; 4 – Neither bad nor good; 3 – Slightly bad; 2 – Bad; 1 – Very bad.

cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – much too little.

TABLE 20

**Mean Student Ratings of the Quality and Quantity
of "C" Food Production School Training: Baking**

Quality		Category	Quantity	
Rank ^a	Mean ^b		Rank ^a	Mean ^c
2	6.61	Bread baking	2	4.86
3	6.59	Pie baking	6	4.74
4	6.52	Preparation of pie fillings	5	4.77
5.5	6.46	Preparation of quick breads	7	4.71
7	6.44	Preparation of sweet doughs	8.5	4.68
14.5	5.97	Cake baking	15	4.47
26	5.42	Cookie baking	26	3.71
16	5.96	Use of bread-dough mixers	16	4.21
17	5.72	Use of bake ovens	17	4.15

^aRank of the mean out of 61 category means

^bQuality scale: 7 – Very well covered; 6 – Well covered; 5 – Slightly well covered; 4 – Neither well nor poorly covered; 3 – Slightly poorly covered; 2 – Poorly covered; 1 – Very poorly covered.

^cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

MEAN STUDENT RATINGS

selected vocational agriculture students in Michigan have received training and are learning to solve job related tasks related to their agriculture training. These learning situations are being taught using both the traditional methods of instruction and the newer teaching methods of programmed instruction.

TABLE 21

Mean Graduate Ratings of the Quality and Quantity of "C" Food Production School Training: Baking

Rank ^a	Quality		Category	Quantity	
	Rank ^a	Mean ^b		Rank ^a	Mean ^c
18	5.76	Pie baking	38	3.39	
29	5.50	Cake baking	31	3.67	
30	5.47	Bread and roll baking	33	3.56	
13.5	5.89	Use of baking equipment	28	3.82	

^aRank of the mean out of 42 category means

^bQuality scale: 7 – Very good; 6 – Good; 5 – Slightly good; 4 – Neither bad nor good; 3 – Slightly bad; 2 – Bad; 1 – Very bad.

^cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

A question concerning how well "C" Food Production School prepares graduates in baking was also asked of food management team members and school instructors (Table 16). The absolute mean ratings differed a bit, 5.11 (just above "slightly well") given by the team members and 6.00 ("well") given by the instructors; however, when ranked among all eleven categories rated, baking training ranked third for both groups. When asked whether more baking training should be added to "C" Food Production School, 25% of the instructors and 58% of food management team members responded positively.

OTHER CULINARY TASKS

Several of the surveys/interviews used contained questions concerning culinary tasks which seem to be separable from the cooking and baking topics. For the sake of organization, they have been split into three general categories; garnishing; preparation of sauces, gravies and soups; and cake decoration.

Garnishing

"A" School training. Training in garnishing was given a high mean rating by "A" School students (6.17 on a seven-point scale, between "well covered" and "very well covered"), a rating which ranked sixth among all 76 categories rated by the students. No other group was asked to rate "A" School garnishing training.

"C" Food Production School training. "C" Food Production School students were less enthusiastic about the quality of their training in garnishing, giving it a mean rating of 4.68 on a seven-point scale (between "neither well nor poorly covered" and "slightly well covered"), a rating which ranked lower than 85% of all categories evaluated (52 out of 51). The students' mean rating for amount of training fell between "slightly too little" and "just about right", 3.21 on a seven-point scale. Graduates of the "C" Food Production School gave garnishing a higher mean rating, 5.95, approaching "good". This rating ranked 11.5 out of 42 category means. The graduates' rating of amount of garnishing training approached "just about right", 3.95.

Preparation of Sauces, Gravies and Soups.

"A" School training. "A" School students rated the preparation of sauces (5.73), gravies (5.67) and soups (5.58) as being between "slightly well covered" and "well covered", on the average, in "A" School (all ratings on a seven-point scale). "A" School graduates rated their training in making gravies and sauces (4.59) and making soups (4.50) between "neither bad nor good" and "slightly good". Supervisors in the fleet tended to agree with their graduates concerning "A" School training in making soups, giving such training a mean rating of 4.31, between "neither bad nor good" and "slightly good". They were, however, much more critical than either graduates or students concerning the making of sauces and gravies, giving "A" School training in these categories a rating of 3.38, between "slightly bad" and "neither bad nor good".

"C" Food Production School training. Students rated preparation of sauces and gravies (4.75) and preparation of soups (4.71) as between "neither well nor poorly covered" and "slightly well covered" in their "C" Food Production Course (both ratings again on a seven-point scale). These mean ratings ranked in the lower quarter when compared among all 61 categories rated by the students (ranks of 47.5 and 50, respectively). Graduates of the school gave the same training categories higher mean ratings, 5.88 and 5.75, respectively, between "slightly good" and "good"; responses that ranked 15 and 19 out of 42. The students felt that the amount of their training in these categories was "a bit too little", while graduates rated it as "just about right".

Cake Decoration

"A" School training. Students, graduates, and their supervisors were all in agreement that cake decorating was the least well trained area in the "A" School (actually, there is no cake decoration training in "A" School). Students gave it a mean rating of 3.19 on a seven-point scale (between "slightly poorly covered" and "neither well nor poorly covered"), graduates 3.12 (between "slightly bad" and "neither good nor bad"), and supervisors 2.31 (between "bad" and "slightly bad"). The respective rankings of these mean ratings when compared to all categories rated were 75 out of 76, 41 out of 41, and 41 out of 41. Both graduates (2.51 on a seven-point scale) and supervisors (2.14) rated the amount of training as between "too little" and "a bit too little". Because

of these ratings, "A" School instructors and food management team members were asked whether cake decorating should be added to the "A" School course. The response was very strongly negative, with 87% of the team members and 90% of the instructors saying no.

"C" Food Production School training. These graduates also gave cake decorating training their lowest rating (42 out of 42), although the actual mean rating itself was between "neither well nor poorly covered" and "slightly well covered", 4.53 on a seven-point scale. They rated the amount of coverage between "too little" and "a bit too little", a mean of 2.62 on a seven-point scale. "C" Food Production School students were much more positive, giving cake decoration training a mean rating of 6.46, between "well covered" and "very well covered", a rating which ranked 5.5 out of 42 categories rated. These students felt that the amount of training was "just about right". All "C" Food Production School instructors and 63% of the food management team members basically concurred with the students, maintaining that more training in cake decorating should not be added to the "C" Food Production Course. However, all instructors and all but one team member agreed that cake decorating, at its present level, was an integral part of the course for both practical and morale reasons.

RECIPE CONVERSION AND PORTION CONTROL

Recipe Conversion

"A" School training. "A" School students, instructors, and food management team members all perceived recipe conversion as being the best trained subject in "A" School. On seven-point scales, the mean response of the students was 6.49 (between "well covered" and "very well covered"); of the instructors, 6.26 (between "well" and "very well" prepared) and of the food management team members, 5.57 (between "slightly well" and "well" prepared). As indicated above, when compared to all categories evaluated, the respective rankings were first out of 76, first out of eleven and first out of eleven. "A" School graduates gave a slightly lower mean rating, 5.27 (between "slightly good" and "good"), but even this lower rating ranked fifth out of all 41 categories evaluated. In addition, 79% of the cooks and strikers surveyed in the fleet who were not "A" School graduates, maintained that going to "A" School would have helped them in recipe conversion. The single dissenting group were the supervisors in the fleet who rated recipe conversion training in "A" School between "slightly bad" and "neither good nor bad", a mean of 3.83, with this response ranking 16.5 out of 41 categories rated. On the other hand, when asked to compare their "A" School graduates to nongraduates concerning recipe conversion, supervisors rated the graduates between "slightly better" and "better", a mean of 2.55 on a seven-point scale.

"C" Food Production School training. "C" Food Production School students and graduates both rated their training in recipe conversion between "well covered/good" and "very well covered/very good", means of 6.71 and 6.30 respectively, on seven-point scales. The students perceived it as the best trained area out of 61, and the graduates as second best out of 42. In addition, 67% of the watch captains surveyed in the fleet who were not "C" Food Production School graduates said that going to "C" Food Production School would have helped them in recipe conversion.

Portion Control

A question was directed toward "A" School graduates and their supervisors in the fleet concerning portion control training in "A" School. Supervisors rated the "A" School training in portion control between "slightly bad" and "neither bad nor good", a mean of 3.55 on a seven-point scale, the rating ranking 25 out of 41 categories evaluated. The graduates were a bit more positive, assigning a mean rating of 4.54, between "neither bad nor good" and "slightly good". Their rating had a similar ranking to that of the supervisors, 27 out of 41. Both groups felt that the amount of portion control training fell between "a bit too little" and "just about right", means of 3.14 and 3.58, respectively, on seven-point scales.

NUTRITION AND MENU PLANNING

Nutrition

"A" School training. Graduates rated the quality of their "A" School instruction in nutrition as "slightly good" (a mean of 4.98 on a seven-point scale), ranking twelfth out of all 41 categories rated. Food management team members gave such training a very similar mean rating of 4.83 on a seven-point scale (between "neither well nor poorly" and "slightly well" trained), with this response ranking fourth out of eleven categories. As might be anticipated from their previous ratings, "A" School instructors were more positive on the average, rating how well students were trained in nutrition as 5.48 (between "well" and "slightly well"; and supervisors were more negative, giving a mean rating of 3.72 (between "slightly bad" and "neither good nor bad"). Supervisors did, however, rate their "A" School graduates between "better" and "slightly better" trained in nutrition than their nongraduate counterparts (a mean of 2.79 on a seven-point scale). Of these groups, only the supervisors expressed the opinion that there should be a bit more nutrition training in "A" School.

"C" Food Production School training. Graduates, students, instructors, and food management team members were all positive about nutrition training in this school with mean ratings ranging between "slightly well" and "very well" (6.05, 6.06, 6.23, and 5.39, respectively, on seven-point scales ranking 8.5 out of 42, 11.5 out of 61, first out of twelve, and second out of twelve). The amount of training was judged to be adequate by all four groups.

Menu Planning

"A" School training. In general, "A" School training in menu planning received lower ratings from the three groups queried than did training in nutrition. "A" School graduates and students both rated their training in menu planning between "neither good nor bad" and "slightly good" (means of 4.18 and 4.39, respectively, on seven-point scales). Supervisors were more negative, rating the training between "bad" and "slightly bad" (a mean of 2.83). While graduates and supervisors maintained that the amount of "A" School training in menu planning was a bit too little, 77% of "A" School instructors and 75% of food management team members suggested that the amount of such training not be expanded in "A" School.

"C" Food Production School training. "C" Food Production School students rated menu planning training in their school as being between "neither well nor poorly" and "slightly well" covered (a mean of 4.63 on a seven-point scale). Graduates gave a higher mean rating of 5.59 (between "slightly good" and "good"). On the other hand, it should be noted that these mean ratings ranked 54 out of 61 and 25 out of 42, respectively, both in the lower half of all categories rated.

"C" Management School training. "C" Management School instructors reported that they judged their students to be between "well" and "very well" trained in menu planning (a mean of 6.29 on a seven-point scale, ranking second out of six categories, Table 22). Food management team members gave "C" Management menu planning training a less positive mean response of 5.26 (between "slightly well" and "well" trained); but this mean ranked first among all six categories rated (Table 22). In answer to an open-ended question, 25% of the food management team members interviewed volunteered menu planning as an area which should be taught more in "C" Management School. While such a percentage may seem relatively small, it is not when dealing with voluntary responses to open-ended questions. Furthermore, this response agrees with observations of out Behavioral Sciences Division personnel who have visited Navy food service facilities (as well as those of other services) and have found many menus which, in their opinion, were not optimal.

MOTIVATION

Food Management Team members were asked to evaluate the importance of "the support and cooperation of fellow MS's on board" along with twelve other factors influencing food service operations (Table 5). This factor received a mean rating of 4.20 on a five-point scale, between "very important" and "extremely important". To place this rating in perspective, however, it should be noted that it ranked ninth out of 13 in relation to the other factors rated for importance. This same factor was also rated on a seven-point scale in terms of its present status, in general, in the fleet (Table 6). The mean rating given by team members was slightly on the positive side of neutral (4.12), but ranked fifth out of 13 indicating that, relatively speaking, they considered it to be one of the "average" aspects of current fleet condition.

TABLE 22

**Mean Food Management Team and Food Service School Instructor Ratings
of How Well "C" Management School Prepares Graduates**

Topic	Food Management Team N = 19		School Instructors N = 17	
	Rank	Mean	Rank	Mean
Menu planning	1	5.26	2	6.29
Scheduling of personnel	2	4.53	5	5.76
Record keeping	3	4.32	1	6.35
Sanitation	4	4.21	3	6.24
Supervisory skills	5	3.84	6	5.71
Organizing divisional training	6	3.74	4	6.12

Scale: 1 — Very poorly; 2 — Poorly; 3 — Slightly poorly; 4 — Neutral; 5 — Slightly Well; 6 — Well; 7 — Very well.

Supervisors were also asked to compare graduates and nongraduates of the "A" School in terms of their motivation. On a seven-point scale ranging from "A' graduates, much better" (1) to "much worse" (7) supervisors gave a mean rating of 3.48 (between "A' graduates, a bit better" and "just about the same").

The surveys directed toward cooks/strikers and watch captains in the fleet included the four questions of Patchen's Job Motivation Indices (Patchen, 1965).⁵ Each of these questions is scored on a five-point basis with a score of five indicating highest motivation and a score of one, lowest motivation. Table 23 shows the mean responses to these items from Navy MS's as well as from a sample of Loring Air Force Base military food

⁵ Patchen, M. Some questionnaire measures of employee motivation and morale: A report on their reliability and validity. Institute for Social Research, University of Michigan, Ann Arbor, 1965.

service workers. One motivational index used by Patchen is based on responses to all four items and is represented in Table 23 by the overall mean score. Based on this index, note that the watch captains would appear to have a higher degree of motivation than the cooks/strikers. The Loring AFB data falls in between the two sets of Navy data—not surprising when it is considered that the Loring sample included both cooks and shift leaders. In general, then, although the absolute mean scores of the Navy MS's surveyed indicate a motivational level only somewhat higher than neutral, the scores seem comparable to those obtained from a small Air Force sample.

TABLE 23
Mean Responses on Patchen's (1965) Job Motivation Indices*

	Navy Cooks/ Strikers N = 270	Navy Watch Captains N = 80	Loring AFB Workers N = 30
Item 1: Time dragging ^a	2.72	3.41	3.20
Item 2: Involvement in their job ^b	2.93	3.63	3.13
Item 3: Extra work ^c	3.67	4.05	3.55
Item 4: Ease of job ^d	3.62	3.71	3.77
Overall Mean	3.24	3.70	3.41

*5 = highest motivation, 1 = lowest motivation

^aOn most days on your job, how often does time seem to drag for you?

^bSome people are completely involved in their job — they are absorbed in it day and night. For other people, their job is simply one of several interests. How involved do you feel in your job?

^cHow often do you do some extra work for your job which isn't really required of you?

^dWould you say you work harder, less hard, or about the same as other people doing your type of work on this ship (base)?

WORK SCHEDULING

"C" Food Production School Training

Questions concerning training in work scheduling for managers or watch/galley captains were asked only about the "C" School. "C" Food Production School students rated their training in the scheduling of work and equipment for a meal as between "slightly well" and "well" covered (a mean of 5.19 on a seven-point scale). However, this mean rating represented only 47% of the students, since 53% reported that the area wasn't covered at all in the course. The 47% who said it was covered, also felt that the amount of training fell between "a bit too little" and "just about right" (a mean of 3.47 on a seven-point scale). "C" Food Production School graduates were somewhat more positive concerning work planning training, giving it a mean rating of 5.65 (between "slightly good" and "good"). They also reported that the amount of training was "just about right" (a mean of 4.11 on a seven-point scale). Food management team members were asked, open-ended, what should be added to or taught more in "C" Food Production school. In response, 13% (not a large percentage, but not trivial in open-ended responding) listed the organization of workload. Another open-ended question was posed to food management team members concerning the reasons for the "problem" that apparently exists with watch captains. In this instance, 21% of the team members volunteered their belief that scheduling of the men under them was the major problem for watch captains.

"C" Management School Training

"C" Management School instructors felt that graduates of the management course were between "slightly well" and "well" trained in scheduling personnel (a mean of 5.76 on a seven-point scale, Table 22). On the other hand, this mean rating ranked only fifth out of the six categories considered by the instructors. Food management team members tended to reflect this latter orientation and rated "C" Management School graduates as being between "neither well nor poorly" and "slightly well" trained, on the average, in the scheduling of personnel (4.53 on a seven-point scale, Table 22).

SANITATION

Importance and Status in the Fleet

Food management team members were asked to evaluate the importance of sanitation along with twelve other factors influencing food service operations (Table 5). The mean rating for this factor was 4.80 approaching "extremely important" on a five-point scale. Moreover, when this mean was compared to the other factors rated for importance, it ranked second out of 13. Sanitation also rated 2.68 on a seven-point scale, between "bad" and "slightly bad", with 80% of team members giving ratings on the negative side of neutral, in terms of its general present status in the fleet (Table 6). This mean ranked 12 out of 13, next to worst, when compared to the other aspects of current fleet condition.

"A" School Training

Questions concerning training in various aspects of sanitation were asked in all of the surveys/interviews used in the project. Table 24 shows the mean training quality ratings given various sanitation categories by "A" School students. The three categories involving sanitation "theory" had mean ratings centered around "well covered" and ranking in the top 14 of the 76 mean ratings generated. Categories concerning the actual cleaning of equipment and food service deck areas were rated between "slightly well covered" and "well covered", and the means rank in the top third of the 76 categories. Training in the control of rodents and insects was rated slightly lower. Training in scullery operations was rated as "slightly well covered", but the mean ranked 53 out of the 76 means generated.

Table 25 shows the mean ratings given by "A" School graduates for similar "A" School sanitation training categories. While the mean ratings for the personal hygiene, food borne illness theory and sanitizing of equipment and deck areas were lower than these given by the students, note that they were the four highest rated categories when ranked with respect to all 41 categories rated. The graduates concurred in rating training in scullery operations among the less well trained categories (although the actual mean rating fell between "neither bad nor good" and "slightly good"). The ratings for amount of training for all but scullery operations were between "just about right" and "a bit too much". The amount of scullery operations training was rated between "a bit too little" and "just about right". In response to a related question, 56% of the nongraduates of "A" School interviewed in the fleet indicated that they felt going to "A" School would have helped them in the sanitation area.

The supervisors' ratings of their "A" School graduates' training in the sanitation categories were strikingly lower than those of either the students or graduates (Table 26). Note that the highest rating given here was "neither good nor bad" and that the highest mean rank was 13 while the four other categories ranked in the lower half of the 41 categories rated. Particularly notable are two items. First, personal hygiene, ranked highest of the sanitation categories by the graduates, was ranked lowest by the supervisors. Second, the supervisors concurred with the students and graduates in ranking scullery operations relatively low. Supervisor comments on the amount of training in the sanitation areas were consistent with their ratings of quality in indicating that training ranged from "too little" to "slightly too little". Finally, supervisors were asked to compare their "A" School graduate workers with nongraduates in ten broad categories on a seven-point scale. In nine of the categories, "A" graduates were preferred. However, in sanitation the supervisors judged graduates and nongraduates to be "just about the same".

Food management team members were asked how well "A" School prepares graduates in personal hygiene and sanitation (Table 10). Their mean response concerning personal hygiene was 5.26 on a seven-point scale, between "slightly well" and "well", ranking second out of eleven category means. While this response was in agreement with the graduate view of personal hygiene training, the team members' perceptions of sanitation training

TABLE 24

Mean Student Ratings of the Quality of "A" School Training: Sanitation

Rank ^a	Category	Mean ^b
4.5	Classification of bacteria	6.18
4.5	Prevention of food borne illness	6.18
8	Sanitation of wardroom, galley, and mess deck areas	6.09
13.5	Theory of bacterial food poisoning	5.97
18	Cleaning of galley equipment	5.82
26	Sanitation in baking	5.70
28.5	Control of rodents	5.66
35	Control of insects	5.49
53	Scullery operations	4.96

^aRank of the mean out of 76 category means

^bQuality scale: 7 — Very well covered; 6 — Well covered; 5 — Slightly well covered; 4 — Neither well nor poorly covered; 3 — Slightly poorly covered; 2 — Poorly covered; 1 — Very poorly covered.

TABLE 25

Mean Graduate Ratings of the Quality and Quantity of "A" School Training: Sanitation

Quality		Category	Quantity	
Rank ^a	Mean ^b		Rank ^a	Mean ^c
1	5.85	Personal hygiene	1	4.45
2	5.71	Sanitation of food service equipment	3.5	4.03
3	5.68	Names and descriptions of food borne illnesses	2	4.24
4	5.62	Sanitation of wardroom, galley, and mess deck areas	3.5	4.03
29	4.50	Scullery operations	25.5	3.33

^aRank of the mean out of 41 category means

^bQuality scale: 7 – Very good; 6 – Good; 5 – Slightly good; 4 – Neither bad nor good; 3 – Slightly bad; 2 – Bad; 1 – Very bad.

^cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much, 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

TABLE 26

Mean Supervisor Ratings of the Quality and Quantity of "A" School Training:
Sanitation

Rank ^a	Quality Mean ^b	Category	Rank ^a	Quantity Mean ^c
13	4.10	Sanitation of food service equipment	21	2.97
21	3.66	Sanitation of wardroom, galley, and mess deck area	19	3.07
24	3.59	Names and descriptions of food borne illnesses	40	2.31
26	3.52	Scullery operations	39	2.34
28	3.41	Personal hygiene	31	2.76

^aRank of this mean out of 41 category means^bQuality scale: 7 - Very good; 6 - Good; 5 - Slightly good; 4 - Neither bad nor good; 3 - Slightly bad; 2 - Bad; 1 - Very bad.^cQuantity scale: 7 - Much too much; 6 - Too much; 5 - A bit too much; 4 - Just about right; 3 - A bit too little; 2 - Too little; 1 - Much too little.

were more in line with those of the supervisors. Team members rated how well "A" School graduates were prepared in sanitation as "neither well nor poorly", a mean of 4.22 on a seven-point scale. Relative to the other training categories rated for "A" School, it ranked next to lowest, tenth out of eleven. In response to the same set of questions, "A" School instructors were closer to the students and graduates in their opinions, giving the "A" School a rating for preparing graduates approaching "well", 5.90 on a seven-point scale (the mean ranking third out of eleven) in sanitation and between "slightly well" and "well", 5.77 (the mean ranking 4.5 out of eleven) in personal hygiene. When asked, open ended, what area should be added to or taught more in "A" School, 42% of the food management team members and 16% of the school instructors volunteered sanitation.

"C" Food Production School Training

School instructors and food management team members were asked how well "C" Food Production School prepared graduates in the area of sanitation (Table 16). Instructors were more positive than team members, giving a mean rating of 6.14 on a seven-point scale, between "well" and "very well", a rating which ranked second out of twelve categories. The team members' mean rating fell near "neither well nor good", 4.11 on a seven-point scale, and ranked near the bottom, tenth out of twelve, when compared to the other categories rated.

Table 27 shows the mean quality and quantity ratings given various sanitation training categories by "C" Food Production School students. The mean ratings ranged from 5.97 to 6.36, from "well covered" to between "well covered" and "very well covered", and rank between 8.5 and 14.5 when compared among all 61 categories. The ratings for amount of training fell between "just about right" and "a bit too much", and rank between 3.5 and 14 out of 61 categories. "C" Food Production School graduates gave similar mean ratings to the sanitation categories, 6.08 to 6.43, ratings which have higher rank orders, between 1 and 7 out of 42, than those of the students (Table 28). When asked if they felt going to "C" Food Production School would have helped them in sanitation, 67% of nongraduate watch captains surveyed in the fleet responded affirmatively.

A question concerning how well "C" Management School prepares graduates in sanitation was also asked of food management team members and instructors (Table 22). Team members felt that the training was done between "neither well nor poorly" and "slightly well", a mean of 4.21 on a seven-point scale, whereas instructors felt it was done between "well" and "very well", a mean of 6.24 on the same scale. In response to an open-ended question about what should be added to or taught more in "C" Management School, 21% of the team members suggested sanitation.

Sanitation in General

Some observations about sanitation in general can be made from responses to some of the interview questions addressed to instructors and food management team members.

TABLE 27

**Mean Student Ratings of the Quality and Quantity of "C" Food Production
School Training: Sanitation**

Rank ^a	Quality Mean ^b	Category	Rank ^a	Quantity Mean ^c
8.5	6.36	Names and descriptions of food borne illnesses	3.5	4.82
8.5	6.36	Prevention of food borne illnesses	3.5	4.82
10	6.09	Rodent and insect control	14	4.50
11.5	6.06	Personal hygiene	8.5	4.68
14.5	5.97	Sanitation of food service equipment	13	4.64

^aRank of the mean out of 61 category means

^bQuality scale: 7 – Very well covered; 6 – Well covered; 5 – Slightly well covered; 4 – Neither well nor poorly covered; 3 – Slightly poorly covered; 2 – Poorly covered; 1 – Very poorly covered.

^cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

TABLE 28

Mean Graduate Ratings of the Quality and Quantity of "C" Food Production
School Training: Sanitation

Rank ^a	Quality	Category	Rank ^a	Quantity
	Mean ^b			Mean ^c
1	6.43	Personal Hygiene	4	4.29
3	6.29	Sanitation of wardroom, galley, and mess deck areas	19	3.94
4	6.27	Sanitation of food service equipment	7	4.12
6	6.16	Prevention of food borne illnesses	3	4.41
7	6.08	Rodent and insect control	16	4.00

^aRank of this mean out of 42 category means

^bQuality scale: 7 – Very good; 6 – Good; 5 – Slightly good; 4 – Neither bad nor good; 3 – Slightly bad; 2 – Bad; 1 – Very bad.

^cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

Sizable percentages (for an open-ended question) of 10% and 29%, respectively, suggested that sanitation was the major problem in the fleet in which training was a factor. Team members were also asked, in a related question, whether they felt mess deck masters-at-arms needed a training course. Seventy-one percent responded affirmatively — and four of the seven who answered "no" specifically qualified that negative answer by asserting that the masters-at-arms should be MS's and, therefore, not require special training. Finally, food management team members were asked, given the discrepancy between student/graduate and supervisor ratings of sanitation training, was there or was there not a sanitation problem in the fleet, and if so, why. All agreed that the problem existed. A small percentage (13%) suggested that too much emphasis on theory and not on practice in the "A" School was the main problem. Far more team members (83%), however, laid the blame at the door of supervisors for not coordinating the sanitation program and insisting that it be carried out. The watch captains were singled out by 25% of the team members, and the leading MS by 58%.

WARDROOM/HOUSEKEEPING

"A" School Training

Questions were asked in some of the surveys/interviews concerning two areas: first, housekeeping and second, wardroom table setting, serving and administration. All of these might logically be grouped together since they were formerly exclusively tasks for stewards. "A" School graduates gave their training in housekeeping a mean rating of 4.71 on a seven-point scale (between "neither bad nor good" and "slightly good"), a rating which ranked 18 out of 41 categories. Their mean rating for amount of training in housekeeping was 3.37, between "just about right" and "a bit too little". The mean supervisors' rating of their "A" School graduates' training in housekeeping was lower than that of the graduates, 3.31 on a seven-point scale (between "slightly bad" and "neither good nor bad") and ranked 33 out of 41 categories rated. Supervisors felt that the amount of "A" School training in housekeeping fell between "too little" and "a bit too little", a mean of 2.83 on a seven-point scale.

Table 29 shows the mean quality ratings given wardroom table setting, serving, and administration categories by "A" School students. The ratings all centered around 6.00, "well covered" with the lowest rated category being administration of officers messes afloat. "A" School graduates rated two similar categories, serving meals in the wardroom and table setting, lower than did the students, 5.21 and 5.20, respectively, on a seven-point scale (between "slightly good" and "good"). However, these categories ranked sixth and seventh when compared with the other categories rated by the graduates. The graduates felt that the amount of training in these categories fell between "a bit too little" and "just about right" (means of 3.63 and 3.59, respectively, on a seven-point scale).

TABLE 29
Mean Student Ratings of the Quality of "A" School Training: Wardroom

Rank ^a	Category	Mean ^b
3	Seating arrangements for officers	6.31
7	Serving a meal, formal	6.16
10	Setting of wardroom tables	6.06
24.5	Serving a meal, informal	5.72
33	Administration of officers' messes afloat	5.53

^aRank of the mean out of 76 category means

^bQuality scale: 7 – Very well covered; 6 – Well covered; 5 – Slightly well covered; 4 – Neither well nor poorly covered; 3 – Slightly poorly covered; 2 – Poorly covered; 1 – Very poorly covered.

Supervisors rated the quality of their "A" School graduates' training in serving of meals in the wardroom (3.03 on a seven-point scale, "slightly bad") and table setting (2.97 on a seven-point scale, "slightly bad") much lower, on the average, than either the students or graduates. The ratings rank 37 and 38, respectively, out of 41 categories rated. In terms of amount of training, supervisors felt that training in the serving of meals in the wardroom was between "a bit too little" and "just about right" (a mean of 3.66 on a seven-point scale) while training in table setting was rated as being between "too little" and "a bit too little" (a mean of 2.83 on a seven-point scale).

"C" Food Production School Training

Table 30 shows the mean quality and quantity ratings given four wardroom training categories by "C" Food Production School students. The mean quality ratings ranged from 5.06, "slightly well covered", to 5.25 on a seven-point scale, between "slightly well" and "well covered", and rank between 31 and 38 when compared to all 61 categories rated. The ratings for amount of training fell between "a bit too little" and "just about right". "C" Food Production School graduates gave a higher mean rating for training in proper serving techniques (6.18, just higher than "good" and ranking fifth out of 42 categories rated) and similar mean ratings for the other two wardroom categories (see

TABLE 30

**Mean Student Ratings of the Quality and Quantity of "C" Food Production
School Training: Wardroom**

Rank ^a	Quality Mean ^b	Category	Quantity Rank ^a	Mean ^c
31	5.25	Serving meals in the wardroom	28	3.65
33	5.21	Duties of private mess personnel	31	3.33
36	5.12	Function of 5 types of private mess	42	2.94
38	5.06	Proper serving techniques	32	3.29

^aRank of the mean out of 61 category means

^bQuality scale: 7 – Very well covered; 6 – Well covered; 5 – Slightly well covered; 4 – Neither well nor poorly covered; 3 – Slightly poorly covered; 2 – Poorly covered; 1 – Very poorly covered.

^cQuantity scale: 7 – Much too much; 6 – Too much; 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

TABLE 31

**Mean Graduate Ratings of the Quality and Quantity of "C" Food Production
School Training: Wardroom**

Rank ^a	Quality Mean ^b	Category	Quantity Rank ^a	Mean ^c
5	6.18	Proper serving techniques	26.5	3.83
31	5.44	Duties of private mess personnel	35	3.53
35	5.13	Serving meals in the wardroom	39	3.29

^aRank of the mean out of 42 category means

^bQuality scale: 7 – Very good; 6 – Good; 5 – Slightly good; 4 – Just about right; 3 – Slightly bad; 2 – Bad; 1 – Very bad.

^cQuantity scale: 7 – Much too much; 6 – Too much, 5 – A bit too much; 4 – Just about right; 3 – A bit too little; 2 – Too little; 1 – Much too little.

Table 31). They concurred with the students in rating the amount of training in the wardroom categories between "a bit too little" and "just about right".

SUPPLY

"A" School Training

The questions asked about supply can be grouped into two categories, food storage and breakout for a day's menu. In the former category, "A" School students were asked about their training in the theory of food preservation and storage. They felt that this topic had been "well" covered, giving it a mean rating of 6.08 on a seven-point scale.

All of the relevant groups of respondents were asked to comment on "A" School training in the actual storage of food. Students rated the area between "slightly well" and "well" covered (a mean of 5.40 on a seven-point scale, ranking 38 of 76 categories rated); instructors rated graduates as being between "neither well nor poorly" and "slightly well" trained in the area (a mean of 4.84, ranking tenth of eleven categories rated); graduates rated food storage training between "neither bad nor good" and "slightly good" (a mean of 4.57, ranking 25 of 41 categories rated); food management team members rated graduates as being between "neither well nor poorly" and "slightly well" trained (a mean of 4.43, eighth of eleven categories rated); and supervisors in the fleet rated their graduates' training between "neither bad nor good" and "slightly good" (a mean of 4.14, 12 of 41 categories rated). Note that all of the food storage training ratings, except for that of the supervisors, ranked in the lower half of the categories rated by each group.

"A" School graduates were more critical of their training in breakout for a day's menu, reporting that this training was between "neither good nor bad" and "slightly good", a mean of 4.15 on a seven-point scale. This rating ranks 38 when compared among all 41 categories rated. Supervisors in the fleet were also critical of this training, giving it a mean rating between "slightly bad" and "neither bad nor good", 3.62, ranking 22.5 of 41 categories rated. Graduates reported the amount of training in daily breakout as "slightly too little", a mean of 2.98 on a seven-point scale, and supervisors gave a virtually identical 2.93 mean rating.

"C" Food Production School Training

"C" Food Production School graduates were also asked about their training in daily breakouts. Their responses were far more positive, resulting in a mean rating of 5.69 on a seven-point scale between "slightly good" and "good", although the rating ranks in the middle, 21 of 42, when compared to all categories rated.

CUSTOMER RELATIONS

Importance and Status in the Fleet

Food management team members rated the level of customer satisfaction (certainly related to customer relations) as between "very" and "extremely" important to the success of a food service operation, a mean rating of 4.72 on a five-point scale (Table 5). In addition, they rated the present overall status of customer satisfaction in the fleet between "neither good nor bad" and "slightly good", a mean of 4.44 on a seven-point scale (Table 6).

"A" School Training

Ratings of "A" School training in customer relations were relatively low. Supervisors in the fleet gave such training a mean rating between "slightly bad" and "neither good nor bad", 3.62 on a seven-point scale, a rating which ranks 23 out of 41 categories rated. Food management team members perceived "A" School graduates as being between "neither well nor poorly" and "slightly well" trained in customer relations, a mean of 4.52 on a seven-point scale, sixth out of eleven categories rated (Table 10). "A" School instructors concurred with team members, rating the graduates as being trained between "neither well nor poorly" and "slightly well", a mean of 4.78 on the same scale, ranking eighth out of eleven categories (Table 10). "A" School graduates rated customer relations training between "neither bad nor good" and "slightly good", a mean of 4.48 on a seven-point scale, ranking 32 out of 41 categories. Note that the ratings of the latter two groups while above neutral in the absolute sense, were low when compared to ratings for other categories.

"A" School graduates and supervisors in the fleet also reported that the amount of training in customer relations centered around "slightly too little" and from "slightly too little" to "too little", mean ratings of 3.09 and 2.66, respectively, on seven-point scales. Most instructors (97%) and food management team members (71%) felt that customer relations should be given more attention in "A" School.

"C" Food Production School Training

The same general picture holds for the perceived status of customer relations training in the "C" Food Production School although instructors gave an absolute mean rating of 5.46 on a seven-point scale, between "slightly well" and "well" trained (Table 16). When this rating is compared to the twelve other categories rated, however, it ranks eighth. "C" Food Production School students and graduates rated the training between "neither bad nor good" and "slightly good", means of 4.30 and 4.81 on seven-point scales, respectively. Both ratings rank quite low when compared to the other categories, 59 out of 61 and 39 out of 42. Food management team members felt that graduates were between "neither well nor poorly" and "slightly well" trained, a mean of 4.67 on a

seven-point scale, ranking eighth out of twelve categories rated (Table 16). Approximately three quarters of food management team members (71%) and school instructors (75%) felt customer relations training should be given more attention in the "C" Food Production course.

PREVENTIVE MAINTENANCE

Importance and Status in the Fleet

Food management team members were asked to evaluate the importance of the condition of equipment and utensils along with twelve other factors influencing food service operations (Table 5). This factor received a mean rating of 4.72 on a five-point scale, between "very important" and "extremely important". Moreover, this mean ranked quite high, 3.5 out of 13, in relation to the other factors rated for importance. The same factor was also rated on a seven-point scale in terms of the quality of its present status, in general, in the fleet (Table 6). The mean rating given by team members was between "bad" and "slightly bad" (2.50) with 87% of team members giving ratings on the negative side of neutral, and ranked 13 out of 13 indicating that they considered it to be the worst aspect of current fleet condition.

"A" School Training

Questions concerning training in the area of preventive maintenance were asked in the various surveys/interviews used in the project. On the average, "A" School students rated maintenance of galley equipment as being "slightly well covered", 5.18 on a seven-point scale. However, this mean ranks 51 out of the 76 categories rated by the students. "A" School graduates rendered a lower mean rating for routine equipment maintenance training in "A" School, giving it a 4.48 on a seven-point scale (between "neither good nor bad" and "slightly good"). Their mean rating also ranks quite low, 32 out of 41, when compared to other categories rated. The graduates rated the amount of such training as "a bit too little", a mean of 3.10 on a seven-point scale.

On the average, supervisors rated their "A" School graduates' training in routine equipment maintenance between "slightly bad" and "neither good nor bad", 3.38 on a seven-point scale. This mean rating ranked 30 out of 41 categories rated by the supervisors. They rated the amount of such training as between "too little" and "a bit too little", a mean of 2.66 on a seven-point scale.

Food management team members, when asked how well "A" School prepares graduates in preventive maintenance, gave a mean response of 3.25 on a seven-point scale, between "neither well nor poorly" and "slightly poorly" (Table 10). Relative to the other training areas rated for "A" School, this response ranks lowest, eleven out of eleven. In response to the same question, "A" School instructors gave a higher absolute mean rating (4.45 on a seven-point scale, between "neutral" and "slightly well"); but their rating was the same as food management team members' in the relative sense, ranking eleven

out of eleven (Table 10). When asked whether "A" School students should receive more training in preventive maintenance, 87% of the instructors and 71% of the food management team members responded affirmatively.

"C" Food Production School Training

Food management team members and school instructors were also asked how well "C" Food Production School prepared graduates in the area of preventive maintenance (Table 16). Instructors were much more positive than team members, giving a mean rating of 5.69 on a seven-point scale, between "slightly well" and "well", a rating which ranked fifth out of twelve categories. The team members' mean rating fell between "slightly poorly" and "neither well nor poorly", 3.39 on a seven-point scale; and resembled the "A" School training ratings in ranking last when compared to the eleven other categories rated. When asked whether "C" Food Production School students should receive more training in preventive maintenance, 63% of the instructors and 71% of the food management team members responded affirmatively.

SAFETY

Importance and Status in the Fleet

Food management team members rated the importance of a safety program between "very important" and "extremely important" (a mean of 4.52 on a five-point scale). In terms of relative importance, they rated safety near the middle, (sixth) of the thirteen areas they were asked to evaluate (Table 5). Their mean estimate of the status of the safety program in the fleet approximated "slightly bad" (3.04 on a seven-point scale) with 60% of team members giving ratings on the negative side of neutral (Table 6). In terms of relative ranking with the other areas evaluated, the mean safety program rating was in the lower half (8.5 of 13).

"A" School Training

A few questions concerning training in the area of safety were asked in the various instruments used in the project. Food management team members, when asked how well "A" School prepares graduates in safety, gave a mean response of 4.50 on a seven-point scale (between "neutral" and "slightly well"). Relative to the other training areas rated for "A" School, this response ranked in the lower half, seventh out of eleven (Table 10). In response to the same question, "A" School instructors gave a higher absolute rating (5.48 on a seven-point scale, between "slightly well" and "well"); but their rating was similar to food management team members' in the relative sense, ranking safety as 6.5 out of the eleven areas evaluated (Table 10). In response to an open-ended question concerning what should be added or taught more in "A" School, 19% of the instructors volunteered the area of safety in equipment operation.

"C" Food Production School Training

Food management team members and school instructors were also asked how well "C" Food Production School prepared graduates in the area of safety (Table 16). Here, team members were less positive in the absolute mean rating (4.89 on a seven-point scale, between "neither well nor poorly" and "slightly well") than were school instructors (5.36 on a seven-point scale, between "slightly well" and "well"), but more positive when these ratings are ranked relative to ratings of other training areas (team members ranking safety 4.5 and instructors 10.5 out of twelve areas).

"C" Food Production graduates in the fleet rated the quality of their school instruction in safety as "good" (a mean of 5.95 on a seven-point scale). This rating ranks eleven out of 42 when compared to the other training areas evaluated. Their response concerning the amount of training received in "C" Food Production School fell between "a bit too little" and "just about right" (a mean of 3.88 on a seven-point scale).

Food Production students were also positive about the quality of training in the area of safety of food service equipment, giving it a mean rating of 5.50 on a seven-point scale (between "slightly good" and "good"). This rating, when compared to the other areas evaluated, ranks 23 out of 61. The students also concurred with graduates in the fleet in rating the amount of training between "a bit too little" and "just about right" (a mean of 3.85 on a seven-point scale).

Watch captains in the fleet (both "C" Food Production graduates and nongraduates) rated non-school training in safety as "good" (a mean of 5.90 on a seven-point scale). Ranked relative to mean responses to other training areas, safety was quite high (sixth out of 42). The amount on non-school safety training was rated between "just about right" and "a bit too much" (a mean of 4.13 on a seven-point scale).

RECORDS AND RETURNS

"A" School Training

"A" School training in record keeping received relatively low ratings from all groups. "A" School students gave their training in forms and records in mess operation a mean rating of 3.88 on a seven-point scale (between "slightly poor" and "neither well nor poorly" trained), a rating which ranks 72 out of 76 categories. "A" School graduates also rated their record keeping training just below "neither bad nor good" (a mean of 3.97 on a seven-point scale) a rating which ranks 39 out of 41 categories. Supervisors in the fleet gave "A" School record keeping training a mean rating of 2.69 (between "bad" and "slightly bad" on a seven-point scale) which ranks 40 out of 41 categories. Despite these low ratings, most instructors (83%) and food management team members (71%) agreed that record keeping should not be covered in more detail than at present in "A" School since most graduates don't deal with records to any great extent (if at all) until long after their graduation from school.

"C" Food Production School Training

Opinions of records and returns training in the "C" Schools were considerably more favorable. "C" Food Production School students and graduates both rated their use of the food preparation worksheet as being between "slightly well" and "well" covered, means of 5.11 and 5.82 on seven-point scales, respectively. Graduates rated their general training in records and returns as 5.55, between "slightly good" and "good". Instructors gave "C" Food Production record keeping training a mean rating in the same range, 5.36 on a seven-point scale, between "slightly well" and "well" (Table 16). Food management team members gave "C" Food Production record keeping training its lowest mean rating, although still a positive one, 4.39 on a seven-point scale, between "neither well nor poorly" and "slightly well" trained (Table 16). Students and graduates agreed that the amount of record keeping training was too little, and 88% of the instructors and 71% of the food management team members felt that more record keeping should be added to the "C" Food Production curriculum.

"C" Management School Training

"C" Management School instructors rated graduates of that course as being between "well" and "very well" trained in record keeping, a mean of 6.35 on a seven-point scale (Table 22). As a matter of fact, they gave record keeping training their highest rating (first out of six categories rated). Food management team members were again more conservative in their ratings (Table 22), feeling that graduates were between "neither well nor poorly" and "slightly well" trained (a mean of 4.32 on a seven-point scale, ranking third out of six categories rated). While instructors and team members were not specifically asked whether the amount of training in record keeping should be increased, they were asked, open-ended, if anything should be added to the "C" Management School curriculum. Twelve percent of the former group and 21% of the latter volunteered record keeping as such an area. While these are apparently not large percentages, they are not trivial for open-ended responding.

SUPERVISION/LEADERSHIP

Importance and Status in the Fleet

Examination of opinion concerning supervision/leadership was restricted to the school instructor and food management team samples. Food management team members rated the leadership of middle and senior level MS's as the most important component of a successful food service operation out of the 13 components listed (Table 5). Their mean rating on a five-point scale was 4.92, between "very" and "extremely" important, and, obviously, approaching the latter. When asked about the current status of this leadership in the fleet, however, the team members were more negative, giving a mean rating of 3.12 on a seven-point scale, between "slightly bad" and "neither good nor bad". This mean ranks seventh out of 13 categories rated (Table 6).

"C" Food Production School Training

One set of questions centered around the supervision/leadership given by watch captains. Instructors felt that "C" Food Production School graduates were between "slightly well" and "well" trained in watch leadership, a mean of 5.50 on a seven-point scale (Table 16). When compared to mean ratings of other training categories, this ranks only 7.5 out of twelve. Food management team members were somewhat more negative about such training, rating "C" Food Production School graduates between "neither well nor poorly" and "slightly well" trained, a mean of 4.72 on a seven-point scale (Table 16). This mean rating ranks seventh out of twelve categories rated.

Both groups were asked, open-ended, what subject areas should be added to or taught more in the "C" Food Production School curriculum. Twenty-nine percent of the instructors and 63% of the team members volunteered supervision/leadership. Following this question, both groups were specifically asked whether watch leadership should be taught more; 67% of the team members and 88% of the instructors answered affirmatively. Incidentally, most of those who were negative about adding watch leadership instruction agreed that it was very important, but felt that it couldn't be trained.

Instructors and food management team members were asked if watch captains were a major problem in the fleet. Of those who agreed, 26% of the former and 45% of the latter group volunteered lack of watch leadership as the main reason for the problem. When asked, open-ended, to name the major problem in the fleet which training could influence, 13% of instructors and 21% of food management team members volunteered watch leadership.

"C" Management School Training

"C" Management School instructors rated their graduates as being between "slightly well" and "well" trained in supervisory skills, a mean rating of 5.71 (Table 22). However, when compared to the other six categories rated, supervisory skills ranked last. Food management team members gave a mean rating to supervisory skills which ranked fifth out of the six categories rated and had an absolute mean value of 3.84 on a seven-point scale, between "slightly poorly" and "neither well nor poorly" trained (Table 22).

Food management team members were asked open-ended what areas should be added to the "C" Management School course. Nearly half, 47%, cited leadership/supervision.

Finally, in response to the open-ended question mentioned above concerning the major problem in the fleet upon which training could impact, 23% of the instructors and 33% of the team members cited leading petty officer leadership/supervision. If one adds all comments concerning leadership at either the watch captain, leading MS, or general levels, then the total percentages of instructors and food management team members citing supervision/leadership as the major problem in the fleet become 36% and 75% respectively. These, particularly the latter, are quite large for open-ended response percentages.

TRAINING

While this entire report deals with training, an attempt has been made to isolate some aspects of training which are general in nature and cut across some or all of the other categories discussed. Initially, data concerning on-the-job training (OJT) will be considered; followed by analysis of MS responses concerning comparisons of training among different grade levels, opinions of short and long food service courses (other than the complete Navy "A" or "C" School courses) and consideration of requiring a follow-up visit as a component of a food management team assistance visit.

On-the-Job Training (OJT)

Food management team members were asked to evaluate the importance of OJT along with twelve other factors influencing food service operations (Table 5). The mean rating for this factor was 4.12 on a five-point scale, between "very important" and "extremely important". To put this in perspective, however, the rating ranked tenth out of the 13 categories considered for importance by the teams. The present condition or status of OJT in the fleet received a fairly low mean rating by team members: 2.84 on a seven-point scale, between "bad" and "slightly bad" (Table 6). This mean also ranked tenth out of 13 when compared to the other aspects of current fleet food service conditions.

Questions were addressed to food management team members and "C" Food Production School students, graduates, and instructors concerning their preparation in how to conduct OJT. Sixty-two percent of the "C" Food Production School students surveyed reported that "how to give OJT" was not covered at all in the school. These who did give such training a rating, gave a mean response of 4.84 on a seven-point scale, between "neither well nor poorly covered" and "slightly well covered". This mean response ranked a low 56 out of 61 categories. Graduates gave training in how to give OJT a higher mean rating of 5.12, between "slightly good" and "good"; but this mean also ranked relatively low, 36 out of 42, when compared to the other categories rated. Both students and graduates felt there should be more coverage of the area in the school.

"C" Food Production School instructors gave their lowest mean rating to the how to give OJT category, saying that students were between "neither well nor poorly" and "slightly poorly" trained (4.50 on a seven-point scale)-a response ranking twelfth out of twelve categories rated (Table 16). Food management team responses to the same question produced only a slightly higher ranking mean (eleventh out of twelve) and a lower absolute mean rating of 3.77, between "slightly poorly" and "neither well nor poorly" trained (Table 16). When asked in interviews if more training in how to give OJT should be given in "C" Food Production School, 75% of the instructors and 79% of the team members answered affirmatively.

Instructors and food management team members were also asked how well the "C" Management School prepared their graduates in organizing food service division training

(Table 22). Instructors gave a mean rating of 6.12, between "well" and "very well", although the rating ranked fourth out of the six categories evaluated. Team members were more critical, rating how well graduates were trained as 3.74, between "slightly poorly" and "neither well nor poorly", a rating which ranked last out of the six categories rated. Furthermore, when asked, open-ended, to cite reasons for the lack of an OJT program in the fleet, 63% of the team members volunteered responses concerning lack of interest or support from leading MS's.

Training at Different Grade Levels

Cooks, strikers, and watch captains in the fleet were asked a survey question concerning which level of personnel needed extra or more training. As the data in Table 32 indicate, the question should perhaps have been worded to force a choice since most respondents in both groups maintained that all four levels equally needed extra training. A slightly different survey question asked food management members and school instructors to rank order three levels of personnel in terms of how well trained they are. The picture which emerges in Table 33 is not absolutely clear, with instructors tending to feel that watch captains are least well trained and food management team members feeling that leading MS's hold that dubious distinction. One could speculate, based on the data from Table 32, that many of the low ratings for cooks and strikers might be directed at strikers.

Yet another interview question for food management team members addressed a similar area: the adequacy of the number of school graduates in the fleet. Over half of the team members (58%) felt that there were enough "A" School graduates in the fleet although 33% felt there should be more (8% couldn't decide). Responses concerning the number of "C" School graduates were much stronger, however, with 92% of the team members feeling there should be more Food Production graduates and 86% feeling there should be more Management graduates in the fleet. In a related question, school instructors were asked if the position of watch captain was a major problem in the fleet. Of the 61% of the instructors who agreed it was, 74% suggested that watch captains should be graduates of the "C" Food Production School.

Short and Long Food Service Courses

"A" and "C" Food Production School students, cooks/strikers in the fleet and watch captains in the fleet were asked how they would feel about the possibility of attending civilian food service courses as part of a Navy food service career pattern. The mean responses in Table 34 indicate that all four groups were enthusiastic about civilian long courses (described in the survey as "one or two years for an AA degree at a community college with a food service specialty") and were even more in favor of short courses (described as "two weeks, a month, or two months at a school like the Culinary Institute or Cornell").

TABLE 32

Percent of Responses to the Question: "What One Level of Personnel Requires More or Extra Training?"

Respondents	Level				All 4 equal
	Strikers	Cooks	Watch Captains	Senior MS	
Cooks/Strikers	15%	6%	3%	9%	67%
Watch Captains	21%	6%	8%	4%	61%

TABLE 33

Percent of Responses to the Question: "Which Group of MS's is Best Trained?"

Food Management Team Opinions

Group	Best Trained	Middle	Worst Trained
Watch Captains	25%	63%	13%
Cooks/Strikers	50%	4%	46%
Leading MS	21%	38%	42%

School Instructors

Group	Best Trained	Middle	Worst Trained
Cooks/Strikers	39%	45%	16%
Leading MS	45%	26%	49%
Watch Captains	16%	29%	55%

TABLE 34

Mean Responses Concerning Civilian Food Service Courses as Part of a Navy MS Career

Respondents	Short Course	Long Course
"A" School Students	3.43	3.28
"C" School Students	3.62	3.23
Cooks/Strikers in Fleet	3.06	2.98
Watch Captains in Fleet	3.51	3.35

Scale

4	3	2	1
Like very much	Like	Like a bit	Don't care

Food management team members and school instructors were asked a similar question on a seven-point scale. As can be seen in Table 35, their responses were extremely similar to those of the student and fleet personnel, being favorable toward civilian long courses and even more favorable toward civilian short courses. Note that over two thirds of both groups gave the highest possible rating, "like very much" to the short course idea.

Another possibility for short course food service education lies within the Navy itself. Short courses could be offered at fleet schools, by food management team members or, as they currently are to some extent, at the MS school in San Diego. Most of the instructors (86%) and food management team members (92%) felt that the food service short course availability within the Navy should be increased and participation in such courses encouraged.

Food Management Team Follow-Up Visits

The interview with food management team members asked them to react to the suggestion that a single-day, mandatory follow-up visit three or six months after each regular assistance visit, to check on an activity's progress in implementing recommendations, would increase their effectiveness as trainers. Seventy one percent of the team members

Below are the results of responses to a question concerning Civilian Food Service Courses as part of a Navy MS Career.

TABLE 35
Percent of Responses Concerning Civilian Food Service Courses as Part of a Navy MS Career

Response	Food Management Team Members		School Instructors	
	Short course	Long course	Short course	Long course
1. Dislike very much	4%	4%	0%	0%
2. Dislike a little	8%	4%	3%	3%
3. Neither like nor dislike	4%	13%	3%	9%
4. Like a little	4%	8%	6%	13%
5. Like very much	68%	50%	69%	63%

MEAN 5.83 5.58 6.31 5.91

Below are the results of responses to a question concerning Civilian Food Service Courses as Part of a Navy MS Career.

Below are the results of responses to a question concerning Civilian Food Service Courses as Part of a Navy MS Career.

interviewed felt that such a visit at approximately a three-month interval might be useful. Those disagreeing were mainly concerned that such a procedure would cast food management teams more in the role of "inspectors".

SUMMARY

Cooking

Food management team members rated the skill level of cooks between important and very important to the success of the food service operation, although their response ranked 12 out of 13 categories considered for importance. The authors feel that cooking ability must somehow play a critical role in an organization whose main function is providing acceptable meals.

The present skill level of cooks in the fleet was rated by team members as being above the neutral point - the single highest status rating given by team members. NARADCOM military consumer opinion data which show quality and variety of food being problems in most military food service operations studied are suggestive of a possible difference of opinion between the consumer and food management team view of the food and cooking skills of the MS rate.

"A" School training in various categories of cooking skills was rated between slightly well and well covered by students, above neutral to slightly good by graduates, above neutral to good by supervisors in the fleet, slightly well covered by food management team members, and slightly well to well covered by "A" School instructors. The four highest rated categories by supervisors (out of 41) were cooking skill categories. All groups asked (students, graduates, and supervisors) agreed that there was a need for more training in this area.

"A" School student, graduate, and instructor ratings of training in the use of food service equipment clustered around slightly good. Supervisor ratings ranged between slightly bad and slightly good while the food management team mean rating was between neutral and slightly well. The steamer was singled out as the piece of equipment on which training was the least adequate. The groups queried (students, graduates, and instructors) concurred in implying a need for expansion of this training category in "A" School.

"A" School graduates rated their training in progressive cookery between neutral and slightly good while their supervisors rated it a bit below neutral. Both groups agreed that the amount of progressive cookery training was slightly too little.

Within the groups of Navy personnel surveyed there was a unanimous opinion that the "A" School cooking laboratory was too short. A study of a revised training course for Coast Guard Subsistence Specialists showed that increased "hands-on" training in their

entry level training course resulted in higher ratings of training and improved performance in the early portion of initial assignments. In addition, many "A" School students, graduates, instructors, and food management team members felt "A" School graduates would be better prepared if they were trained in an actual galley, in addition to their laboratory training. The Coast Guard data support such a laboratory-galley training sequence.

Most food management team members and instructors agreed that the ideal size for a student group at a given cooking laboratory station was three, with four being an upper limit.

"C" Food Production School students, graduates, instructors, and food management team members generally agreed that training in cooking skill categories ranged from slightly good to good. Students felt they might need more training in some cooking categories, but graduates with fleet experience disagreed.

Students, instructors, and food management team members rated "C" Food Production School training in the use of food service equipment between slightly good and good, while graduates rated it higher, just above good. Graduates again judged the amount of training to be just about right. The same general ratings occurred concerning the quality and quantity of "C" Food Production School progressive cookery training.

Baking

Instructors and food management team members differed concerning the quality of baking training in "A" School, with the former group rating it as well covered and the latter group as between neutral and slightly well covered. "A" School students, graduates, and their supervisors rated more specific sub-categories of baking training, and were in general agreement in rating most baking categories between neutral and good with students giving the highest ratings and supervisors, the lowest. All three groups expressed concern about training in the use of the bread-dough mixer. Students gave their lowest rating to cake baking training, supervisors to cake and pie baking training, and graduates also rated cake and pie baking training relatively low indicating general concern with these categories. Students, graduates, instructors, and supervisors all favored an increase in the amount of "A" School baking training.

Baking training in "C" Food Production School was rated mostly between well covered and very well covered by students and from slightly good to good by graduates. Instructors and food management team members concurred in positive ratings of such training in "C" Food Production School. Instructors and students generally felt that there was presently enough baking training in "C" Food Production School while graduates felt they had received a bit too little and a slight majority of team members felt that more might be needed.

Other Culinary Tasks

Garnishing was rated as being well covered by "A" School students and "C" Food Production School graduates in their respective courses. "C" Food Production School students rated it between neutral and slightly well covered, a rating lower than 85% of all categories evaluated.

"A" School training in the preparation of soups was given neutral to good ratings by students, graduates, and their supervisors. The students and graduates also concurred in rating "A" School training in the preparation of sauces and gravies between neutral and good. Supervisors, however, rated training in this latter category between slightly bad and neutral. "C" Food Production graduates rated their training in preparation of sauces, gravies and soups between slightly good and good. Students rated it between neutral and slightly well covered, these categories falling in the lower quarter of all categories evaluated.

Cake decorating, which is not covered in "A" School, was rated as the least well trained area in "A" School by students, graduates, and supervisors. Although these groups felt that it should be covered, approximately 90% of instructors and food management team members agreed that it was not needed at the "A" School level. "C" Food Production graduates also felt least well trained in cake decorating, but the students gave it a rating between good and very good. Instructors and food management team members agreed, for the most part, that cake decorating should be a part of the "C" Food Production curriculum, but that no additional training in the area was required.

Recipe Conversion and Portion Control

Students, instructors, and food management team members all perceived recipe conversion as the best trained subject in "A" School. Graduates felt the training was slightly good to good, their rating ranking fifth out of 41 categories. Supervisors disagreed, rating "A" School training in recipe conversion between slightly bad and neutral; on the other hand, when asked to compare "A" School graduates to nongraduates concerning recipe conversion, they rated graduates between slightly better and better.

"C" Food Production School students and graduates rated their recipe conversion training between good and very good. The students perceived it as the best trained area, and the graduates as the second best.

"A" School graduates rated their training in portion control between neutral and slightly good, while their supervisors rated it between slightly bad and neutral. Both groups felt that the amount of portion control training was between a bit too little and just about right.

Nutrition and Menu Planning

"A" School graduates, instructors, and food management team members rated "A" School training in nutrition between neutral and good. Supervisors rated the nutrition training just short of neutral, but also rated "A" School graduates as better prepared in nutrition than nongraduates. "C" Food Production School training in nutrition was rated between good and very good by all groups asked.

"A" School graduates and students rated menu planning training in "A" School between neutral and slightly good, while supervisors rated it between slightly bad and bad. However, approximately 75% of "A" School instructors and food management team members interviewed felt that menu planning was not an appropriate subject to expand in "A" School. "C" Food Production School students rated their menu planning training between neutral and slightly good, while graduates rated it between good and slightly good. Both groups' responses, however, ranked in the lower half of all categories rated.

Food management team members and "C" Management School instructors felt that graduates of that course were between slightly well and well prepared in menu planning, although some team members believed that more menu planning should be taught in the "C" Management School.

Motivation

Food Management team evaluations indicate that they did not perceive the motivation of MS personnel to be particularly high. Supervisors in the fleet rated their "A" School graduates as slightly more motivated than their nongraduates. The strikers, cooks, and watch captains themselves had similar scores to a sample of Air Force cooks on a motivation index, but the scores indicated a motivational level only somewhat higher than neutral.

Work Scheduling

"C" Food Production School graduates and students rated the coverage of the scheduling of work and equipment for a meal between slightly good and good. The students and some food management team members felt that more time might be spent on workload organization in the course. Moreover, some team members felt that inability to schedule their men was the main problem for watch captains in the fleet.

Food management team members felt that "C" Management School graduates were trained between neutral and slightly well in the scheduling of personnel. Instructors rated the graduates as being between slightly well and well-trained, but their rating ranked fifth out of the six categories evaluated.

Sanitation

Food management team members indicated that sanitation was extremely important to the success of the food service operation, while rating the present status of sanitation in the fleet as between slightly bad and bad.

"A" School students, graduates, and instructors concurred in rating that school's training in sanitation theory, sanitation of equipment and deck areas, and personal hygiene as good. For the graduates, four categories which represented these factors ranked first through fourth out of the 41 categories considered. Supervisor ratings of their "A" School graduates training in these categories were strikingly lower, with only one category being rated as neutral and the others between slightly bad and neutral. Food management team members agreed with the student-graduate-instructors view of "A" School training in personal hygiene, rating it between slightly good and good, but supported the supervisors' negative view of sanitation training, giving it a neutral rating which ranked only 10 out of 11 categories considered. All of the groups surveyed showed relative concern for the adequacy of scullery operations training in "A" School.

"C" Food Production School students, graduates, and instructors all rated sanitation training as good. Food management team members again gave lower ratings, nearer neutral, which ranked tenth out of twelve categories considered.

Instructors felt that "C" Management School prepared students well in sanitation, while food management team members rated the training nearer neutral. Almost 25% of the team members volunteered sanitation as an area which should be taught more in "C" Management School.

Some general observations about sanitation were also made. All food management team members agreed that a sanitation problem existed in the fleet, and nearly one-third of them volunteered sanitation as being the major problem in the fleet in which training is a factor. A small percentage of team members suggested that too much emphasis on theory, and not on practice, in the "A" School was the main problem. Far more team members (83%) however, suggested that supervisors (25% mentioned watch captains and 58%, leading MS's) didn't coordinate the sanitation program nor did they insist that it be carried out.

Wardroom/Housekeeping

"A" School graduates rated their training in housekeeping between neutral and slightly good while their supervisors contended that it was between slightly bad and neutral. Both groups felt that more emphasis should be placed on it in the school. "A" School students and graduates rated various types of serving and table setting training between slightly good and very good. Supervisors, however, disagreed, rating training in these two categories as slightly bad and indicating a need for additional training in the course.

"C" Food Production School students and graduates rated most aspects of their training in wardroom serving and administration between slightly good and good. Both groups expressed a desire for additional training, particularly in the wardroom administration categories.

Supply

"A" School students felt well prepared in the theory of food preservation and spoilage. They also felt between slightly well and well prepared in the actual storage of food. The other groups surveyed — graduates, their supervisors, instructors, and food management team members — rated "A" School food storage training between neutral and slightly good.

"A" School graduates rated their training in daily breakouts just above neutral, while their supervisors reported it as being between slightly bad and neutral. Both groups felt that "A" School should have more training in this category. "C" Food Production School graduates reported being between slightly well and well trained in daily breakouts.

Customer Relations

Food management team members rated customer satisfaction, a component of customer relations, between very and extremely important to the success of a food service operation. They also rated the status of customer satisfaction in the fleet between neutral and slightly good.

"A" School training in customer relations was rated between neutral and slightly good by "A" School graduates, instructors, and food management team members, although the ratings by the two former groups were low when compared to other ratings. Supervisors in the fleet were more critical, rating the training between slightly bad and neutral. All groups agreed that more emphasis should be given to customer relations training in "A" School.

"C" Food Production School training in customer relations also received ratings between neutral and slightly good from students, graduates, and food management team members. School instructors were more positive in their absolute rating, seeing graduates as being between slightly well and well trained; but their mean rating was low compared to other categories rated, as were the means of the other three groups. Many instructors and team members called for more customer relations training in the "C" Food Production School.

Preventive Maintenance

"A" School students and graduates rated the training they received in preventive maintenance between neutral and slightly good, but lower in quality than training in most other categories. Supervisors, school instructors, and food management team members felt that "A" School training in this category was between slightly bad and slightly good, the latter two groups rating it as the worst trained category. Most instructors and team members indicated that "A" School students should receive more preventive maintenance training.

"C" Food Production School instructors rated their graduates as being between slightly well and well trained in preventive maintenance. However, food management team members said these graduates were trained between slightly poorly and neutral, the lowest rating team members gave to any "C" Food Production category. Both groups felt that students in this school should receive more preventive maintenance training.

Safety

Survey responses of food management team members indicate that safety is between very and extremely important to the success of Navy food service operations. These same team members rated the present status of the safety program in the fleet as slightly bad.

Food management team members felt that both "A" and "C" Food Production School graduates were between neutral and slightly well trained in safety. School instructors were more positive, rating both sets of graduates between slightly well and well trained. "C" Food Production School students and graduates agreed with the instructors rating their safety training between slightly good and good.

Records and Returns

"A" School record keeping training received relatively low ratings, between slightly bad and neutral, from students, graduates, and their supervisors in the fleet. However, most instructors (83%) and food management team members (71%) agreed that it should not be covered in any more detail than at present.

"C" Food Production School students, graduates, and instructors concurred in rating that school's record keeping training between slightly good and good. Food management team members rated it between neutral and slightly good. All groups agreed that additional record keeping instruction was desirable in the "C" Food Production School.

"C" Management School instructors rated their school's training in records between good and very good, as a matter of fact, as the best instructed area. Food management team members rated it between neutral and slightly good. Some instructors and team members encouraged the expansion of records training in the "C" Management School.

Supervision/Leadership

Food management team members rated leadership of middle and senior level MS's as the single most important component of a successful food service operation. They also rated the present status of such leadership in the fleet between slightly bad and neutral.

Instructors and food management team members rated "C" Food Production graduates as being between neutral and well trained in watch leadership, although the mean ratings

of both groups fell in the lower half of all categories rated. Most instructors and team members felt that watch leadership should be more heavily emphasized in the course. Members of both groups perceived watch leadership as being the major problem in the fleet which training might impact.

Both instructors and food management team members felt that leadership/supervision training should be added to the "C" Management course. Members of both groups perceived leading petty officer leadership as being the major problem in the fleet which training might impact. All together, leadership/supervision of one type or another was cited as the major problem in the fleet by 36% of the instructors and 75% of the food management team members.

Training

Food management team members rated OJT as very important to the success of a food service operation. However, this rating ranked only tenth out of 13 categories considered for importance by the teams. The present status of OJT in the fleet received a low rating by team members, between slightly bad and bad, ranking tenth out of 13 categories rated.

"C" Food Production School training in how to give OJT received mixed absolute ratings from students, graduates, instructors, and food management team members. However, the respective rank order of the ratings given this training, compared to other categories of training rated, were very low: 56 of 61, 36 of 42, twelfth, of twelve and eleventh of twelve.

Instructors and food management team members disagreed concerning how well graduates were trained in organizing divisional training at the "C" Management School level. Instructors gave a mean rating between well and very well (although it ranked fourth out of six areas rated) and team members, between neutral and slightly poorly, sixth out of six categories rated. In response to a related question, 63% of food management team members interviewed volunteered the opinion that the major reason for the lack of successful OJT programs in the fleet was the lack of interest and/or support of the leading MS.

Questions oriented around determining the need for training at different levels produced responses suggesting that more watch captains and leading MS's should attend the "C" Food Production and "C" Management Schools. Food management team members were nearly unanimous in expressing such opinions.

All groups queried were positive concerning food service training outside of the formal Navy schools. Strong support was voiced for Navy and civilian food service short courses being made available to MS's.

Seventy-one percent of food management team members interviewed felt that a mandatory, single-day, follow-up visit after each team assistance visit would be useful to check on each activity's program in implementing recommendations. Those disagreeing were mainly concerned that such a procedure would cast them more in the role of inspectors.

RECOMMENDATIONS

Cooking

The food management team members' relatively low rating of the importance of cooking skills would seem to contrast with the food service mission to provide acceptable meals and should be examined with an eye toward an adjustment in priorities.

On one hand, all MS groups surveyed reported that cooking skills training ranged from neutral to good, and food management team members rated the present status of cooking skills in the fleet as relatively high. On the other hand, NARADCOM consumer data are suggestive of complaints concerning food quality. This implication that consumers and MS's are using different standards for their judgements should be investigated in more detail and suitable rectification of any differences should be made.

It is highly recommended that the amount of "hands-on" training in "A" School be increased. Specifically, it is suggested that a laboratory training period should be followed by training experience in an actual galley.

Specific categories which should receive more emphasis in "A" School training are progressive cookery and the use of steamers.

The maximum size for a group at an individual "A" School laboratory work station should be four students.

Baking

"A" School instruction in the use of the bread-dough mixer should be examined with an eye toward expansion.

Evidence from supervisors, students, and graduates suggests that training in the baking of cakes and pies should be expanded in "A" School.

Other Culinary Tasks

Since there seems to be some question about the level of preparation of "A" School graduates in terms of their ability to prepare sauces and gravies, "A" School training in this area should be evaluated for possible modification.

The continuation of cake decorating training at its current level in the "C" Food Production course should be strongly defended on both practical and morale bases. This is one of the few advanced culinary accomplishments available for an MS.

Recipe Conversion and Portion Control

More stress should be placed on portion control in "A" School.

Nutrition and Menu Planning

Based on food management team responses and Behavioral Sciences Division observations, menu planning training should be expanded in the "C" Management School.

Motivation

Since it would seem that a motivated cook is essential to a quality food service system, it is highly recommended that MS's and their views receive strong consideration in any plans to modify Navy food service systems. Further, methods of increasing worker morale should be thoroughly investigated by the Navy even if other food service system changes are not anticipated. A feedback system which offers the MS an opportunity to express his views to the Navy Food Service Systems Office is recommended.

Work Scheduling

Although agreement was not universal among respondents, it is nonetheless recommended, based mostly on food management team perceptions, that emphasis on workload scheduling should be expanded in both "C" Food Production and "C" Management Schools.

Sanitation

More emphasis should be placed on the practice of sanitation in "A" School and less on theory.

Scullery operations training in "A" School should be expanded.

The strongest recommendation in this area, however, is directed toward the coordination and direction of the sanitation program by watch captains and, especially, by leading MS's. This could be accomplished through expanded coverage in both "C" Schools as well as increased emphasis through command channels.

Wardroom/Housekeeping

Data from supervisors would suggest that emphasis on housekeeping/wardroom functions should be added for "A" School students.

Additional instruction in wardroom administration should occur in the "C" Food Production curriculum.

Supply

"A" School training concerning daily breakouts should be strengthened.

Customer Relations

Separate training modules should be developed for the "A" and "C" Food Production Schools. The former should relate to direct behavior on the serving line while the latter should center on broader perspectives; e.g., determination of customer food preferences, establishment of customer feedback systems, etc.

Preventive Maintenance

Training units dealing with preventive maintenance should be developed for use at all three formal schools and in nonformal training.

Determination of responsibility for the maintenance of food service equipment should be reviewed in the light of the apparent inadequacy of the present situation.

Safety

While formal school training in safety is generally rated as good, the concern of food management team members about safety in the fleet suggests that formal safety standards should be emphasized there.

Records and Returns

Despite low training quality ratings, "A" School record keeping instruction should not be given undue attention. Only those records an "A" School graduate is likely to use during the early portion of his first enlistment should be studied.

Increased emphasis on records training should occur in both "C" Schools.

Supervision/Leadership

Management/supervision/leadership training should be expanded in the "C" Food Production and "C" Management Schools.

Attendance at both "C" Schools should be increased. Because of obvious difficulties in rapidly implementing such a suggestion, availability of alternate supervision/leadership training such as short courses, emphasis on food management team assistance visits, correspondence courses, etc. should be greatly expanded.

Training

Every effort should be made to strengthen the OJT program in the fleet.

"C" Food Production School training in how to conduct OJT should be strengthened considerably.

"C" Management School instruction concerning the organization of divisional training should be expanded and improved.

More Navy food service short courses should be offered, and the Navy should consider sending MS's to both short- and long-term civilian food service courses, particularly the former.

In order to increase the effectiveness of training accomplished on food management team assistance visits and to provide feedback to teams concerning implementation of their suggestions, a mandatory return visit should be scheduled three months after the initial assistance visit.

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APPENDIX A

U. S. NAVY TRAINING ATTITUDE SURVEY (COOKS AND STRIKERS)

U. S. Army Natick Development Center
Natick, Massachusetts

APPENDIX A

U. S. NAVY TRAINING ATTITUDE SURVEY

The U. S. Army Natick Development Center is working with the Navy to evaluate the training of food service personnel. You have been selected as part of the sample and will receive some forms to fill out. This particular form is a survey geared toward your attitudes about the food service training you have or have not received in the Navy. The responses you make on this survey will help the Navy decide what aspects of food service training should be changed. Please take your time, and answer each part of each question carefully and honestly.

You will notice that we ask for your social security number. This is to be used ONLY to match your answers on this survey with any of the other forms you fill out for us. The information will be treated as confidential, and no one on this ship or in the Navy will see your responses with your social security number or name attached.

* * * * *

1. Social Security Number _____
2. Please tell us how satisfied you are with your present job in the following categories. (Please check one answer for each category)

CATEGORY	Very	Happy	Slight-	Neu-	Slight-	Very
	Happy	Happy	ly Happy	tral	ly Un-	Un-
a. OJT	—	—	—	—	—	—
b. Formal training you received for the job	—	—	—	—	—	—
c. Recognition for work done	—	—	—	—	—	—
d. Your co-workers	—	—	—	—	—	—
e. Adequacy of pay	—	—	—	—	—	—
f. Promotion opportunity	—	—	—	—	—	—
g. Adequate tools/supplies to do the job	—	—	—	—	—	—
h. Attitude of customers	—	—	—	—	—	—

3. For each of the following categories we would like to know how good the training you received was in preparing you for the job you presently do in the fleet. Notice that there are four types of training: No Training, Other Schools, A School, and OJT. If you have had no training at all in a category, you would put a check mark under No Training. JUST WATCHING SOMEONE AND "LEARNING" FROM THAT IS THE SAME AS NO TRAINING. If you had training in that category in Other Schools (i.e., civilian food service schools, Navy short courses, etc.) you would put a check mark under Other Schools. Under the A School and OJT headings there are scales running from 1 to 7. The words corresponding to those numbers are:

1	2	3	4	5	6	7
Very Bad	Bad	Slightly Bad	Neither Bad nor	Slightly Good	Good	Very Good

If, in a given category, you received training in A School, you would circle the number corresponding to how good that training was in preparing you for your present work. If not trained in A School in that category, you would leave the 1 to 7 scale blank. You would answer in the same way under OJT if you had received OJT in that category. Remember that by OJT we mean a FORMAL program, not just learning from watching someone else.

EXAMPLE. The following worker was trained in sharpening knives in Joe's Cooking School, in A School, and Navy OJT. He feels that the training in A School was "Slightly Bad" in preparing him for his present job; and the OJT was "Good" in preparing him. He learned to prepare Baked Alaska by watching his Watch Captain. He learned to prepare Chili in Joe's Cooking School. For knife sharpening he circles the appropriate numbers under A School and OJT, and checks under Other Schools. For Baked Alaska he checks under No Training. For Chili he checks under Other Schools. His questionnaire would look like this:

CATEGORY	No Training	Other Schools	A School	OJT
a. Knife sharpening	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
b. Prepare Baked Alaska	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
c. Prepare Chili	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
* * * * *				

CATEGORY	No Training	Other Schools	A School	OJT
a. Breakout for a day's menu	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
b. Stowage of rations	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
c. Roasting meats	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7

CATEGORY	1 Very Bad	2 Bad	3 Slightly Bad	4 Neither Bad nor Good	5 Slightly Good	6 Good	7 Very Good
	No Train- ing	Other Schools	A School	OJT			
d. Grilling meats	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
e. Poultry cookery	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
f. Fish cookery	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
g. Cheese and egg cookery	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
h. Making soups	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
i. Making gravies and sauces	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
j. Salad and salad dressing preparation	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
k. Bread and roll baking	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
l. Cake and pie baking	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
m. Special meals (flight and boat)	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
n. Progressive cookery	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
o. Recipe card conversion	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
p. Serving temperature of foods	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
q. Menu planning	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
r. Portion control	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
s. Nutrition	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
t. Food presentation on serving line	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
u. Inspection of food	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
v. Table setting	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			
w. Serving of meals in wardroom	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7			

	1 Very Bad	2 Bad	3 Slightly Bad	4 Neither Bad nor Good	5 Slightly Good	6 Good	7 Very Good
CATEGORY				No Train- ing	Other Schools	A School	OJT
x. Scullery operations	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
y. Customer relations	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
z. Routine equipment maintenance	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
aa. Use of steam jacketed kettles (coppers)	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
bb. Use of ovens	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
cc. Use of steamers	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
dd. Use of deep fat friers	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
ee. Use of electric griddles	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
ff. Use of bread dough mixers	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
gg. Use of bake ovens	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
hh. Personal hygiene	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
ii. Names and descriptions of food-borne illnesses	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
jj. Sanitation of food service equipment	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
kk. Sanitation of wardroom, galley, mess deck area	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
ll. Record keeping	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
mm. Shipboard and food service organization	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
nn. Housekeeping	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
oo. Cake decorating	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7

4. For the same categories listed in the last question, we now wish to know whether, considering what you do NOW in your job, you think you received too little, too much, or just the right amount of training in A School or OJT. For this question we have a new seven point scale:

1	2	3	4	5	6	7
Much too Little	Too Little	A bit too Little	Just About Right	A bit too Much	Too Much	Much too Much

If you are an A School graduate:

Based on what you do in your present job tell us how much training you received in A School for each category by circling the number on the scale, under A School, which best describes your feelings. Leave the OJT scales blank even if you received OJT in a category.

If you are NOT an A School graduate:

Based on what you do in your present job tell us how much OJT you have received for each category by circling the number on the scale, under OJT, which best describes your feelings. Leave the A School scales blank.

CATEGORY	A School	OJT
a. Breakout for a day's menu	1 2 3 4 5 6 7	1 2 3 4 5 6 7
b. Stowage of rations	1 2 3 4 5 6 7	1 2 3 4 5 6 7
c. Roasting meats	1 2 3 4 5 6 7	1 2 3 4 5 6 7
d. Grilling meats	1 2 3 4 5 6 7	1 2 3 4 5 6 7
e. Poultry cookery	1 2 3 4 5 6 7	1 2 3 4 5 6 7
f. Fish cookery	1 2 3 4 5 6 7	1 2 3 4 5 6 7
g. Cheese and egg cookery	1 2 3 4 5 6 7	1 2 3 4 5 6 7
h. Making soups	1 2 3 4 5 6 7	1 2 3 4 5 6 7
i. Making gravies and sauces	1 2 3 4 5 6 7	1 2 3 4 5 6 7
j. Salad and salad dressing preparation	1 2 3 4 5 6 7	1 2 3 4 5 6 7
k. Bread and roll baking	1 2 3 4 5 6 7	1 2 3 4 5 6 7
l. Cake and pie baking	1 2 3 4 5 6 7	1 2 3 4 5 6 7
m. Special meals (flight and boat)	1 2 3 4 5 6 7	1 2 3 4 5 6 7

1 Much too Little	2 Too Little	3 A bit too Little	4 Just About Right	5 A bit too Much	6 Too Much	7 Much too Much
CATEGORY						
				A School	OJT	
n. Progressive cookery				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
o. Recipe card conversion				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
p. Menu planning				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
q. Serving temperature of foods				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
r. Portion control				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
s. Nutrition				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
t. Food presentation on serving line				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
u. Inspection of food				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
v. Table setting				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
w. Serving of meals in wardroom				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
x. Scullery operations				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
y. Customer relations				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
z. Routine equipment maintenance				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
aa. Use of steam-jacketed kettles (coppers)				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
bb. Use of ovens				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
cc. Use of steamers				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
dd. Use of deep fat friers				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
ee. Use of electric griddles				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
ff. Use of bread-dough mixers				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
gg. Use of bake ovens				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
hh. Personal hygiene				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
ii. Names and descriptions of food borne illnesses				1 2 3 4 5 6 7	1 2 3 4 5 6 7	

1	2	3	4	5	6	7
Much too Little	Too Little	A bit too Little	Just About Right	A bit too Much	Too Much	Much too Much
CATEGORY					A School	OJT
jj. Sanitation of food service equipment					1 2 3 4 5 6 7	1 2 3 4 5 6 7
kk. Sanitation of wardroom, galley, or mess deck areas					1 2 3 4 5 6 7	1 2 3 4 5 6 7
ll. Record keeping					1 2 3 4 5 6 7	1 2 3 4 5 6 7
mm. Shipboard and food service organization					1 2 3 4 5 6 7	1 2 3 4 5 6 7
nn. Housekeeping					1 2 3 4 5 6 7	1 2 3 4 5 6 7
oo. Cake decorating					1 2 3 4 5 6 7	1 2 3 4 5 6 7

5. How would each of the following things affect your feeling toward making Navy Food Service a career? (please check one for each category)

The chances I would make Navy Food Service a career would be:

CATEGORY	Much More Likely	More Likely	A bit More Likely	About the Same	A bit Less Likely	Less Likely	Much Less Likely
a. More duty in shore galleys	—	—	—	—	—	—	—
b. More duty in galleys at sea	—	—	—	—	—	—	—
c. More duty on carriers	—	—	—	—	—	—	—
d. Taking C Food Production course	—	—	—	—	—	—	—
e. Taking C Management course	—	—	—	—	—	—	—
f. Faster promotions	—	—	—	—	—	—	—
g. Taking short courses in Navy Food Service	—	—	—	—	—	—	—
h. Going back to two ratings -- CS and SD	—	—	—	—	—	—	—

6. How would you feel about the possibility of attending civilian food service courses as part of a Navy Food Service career pattern?

A. A short course (ie., two weeks, a month, or two months) at a school like the Culinary Institute or Cornell.

Like Very Much	Like	Like a Bit	Don't Care
—	—	—	—

B. A long course (ie., one or two years for an A.A. degree) at a community college with a food service specialty.

Like Very Much	Like	Like a Bit	Don't Care
—	—	—	—

7. If the Navy were to concentrate on giving extra or more training to one level of personnel only, which do you think it should be?

Cook striker level.

Cook level.

Watch captain level.

Senior MS level (Wardroom or Galley Supervisor).

All four levels have equal need for more or extra training.

8. In the laboratory at A School you generally used smaller equipment than is used in the fleet (it may also have been newer). In your opinion, how much better would the training be if the school used the same size and age equipment now used in the fleet?

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—

9. How often do you think students in the A School "coast through" the laboratories by allowing someone else in their 5 or 6 man laboratory team be the "boss" or do most of the work?

Never	Very Little	Sometimes	Often	Almost Always
—	—	—	—	—

10. How much better or worse would it be to place A School students, with their instructors as supervisors, in an actual galley ---

A. Instead of the present school laboratory.

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—

B. In addition to the present school laboratory.

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—

11. How much time is wasted, in your opinion, in A School either before classes in the morning or in "breaks" between classes?

A Very Great Amount	Quite A Bit	Some	Very Little	None
—	—	—	—	—

* * * * *

In this next series of questions (12 - 18), we are interested in your honest feelings about your work in Navy food service. Please read each item carefully and select the one alternative that **BEST** describes your current feelings.

12. On most days on your job, how often does time seem to drag for you?

- About half the day or more
- About 1/3 of the day
- About 1/4 of the day
- About 1/8 of the day
- Time never seems to drag

13. Some people are completely involved in their job -- they are absorbed in it day and night. For other people, their jobs are simply one of several interests. How involved do you feel in your job?

- Very little involved; my other interests are more absorbing.
- Slightly involved.
- Moderately involved; my job and my other interests are equally absorbing.
- Strongly involved.
- Very strongly involved; my work is the most absorbing influence in my life.

14. How often do you do some extra work for your job which isn't really required of you?

- Almost every day.
- Several times a week.
- About once a week.
- Once every few weeks.
- About once a month or less.

15. Would you say you work harder, less hard, or about the same as other people doing your type of work on this ship?

- Much harder than most others.
- A little harder than most others.
- About the same as most others.
- A little less hard than most others.
- Much less hard than most others.

16. In most job situations there are differences in the amount of time during which a worker can control his moment to moment activities. The rest is controlled by the tasks assigned him by supervisors. If you could plan your schedule, would you

- Replace or reeducate your supervisors so that they would give you more opportunity to control your own activities.
- Organize tasks differently so that you could have more opportunity to control your own activities.
- Make some changes in tasks or supervision so that you had more choice on what you were doing at a given moment.
- Change very little because the job itself limits any individual's control over his own activities.
- Change nothing because you already have enough control over your own activities.

17. In relation to the other people that you work with, to what degree do the day-to-day jobs assigned you require skill, responsibility, and independent thinking?

- Very much.
- Much.
- Average.
- Little.
- Very little.

18. During the time you have been a Navy food service worker, you have probably compared your job to similar jobs in the civilian world. If you could choose, would you

- Leave Navy food service and seek a civilian food service job.
- Leave Navy food service and seek a civilian non-food service job.
- Leave Navy food service and seek another Navy job.
- Consider leaving Navy food service, but stay a little while longer.
- Stay in Navy food service.

19. We would like you to use the set of items below to describe your immediate supervisor in your present job (your watch captain, chief MS, or whoever is the "boss" just highest over you). The items below each describe a supervisor. We want to know if they describe YOUR supervisor. If an item does describe your supervisor, circle the "Y" (yes) next to that item. If it does not describe your supervisor, circle the "N" (no). If you cannot decide or do not know what the item means, circle the "?". Please circle a "Y", "N", or "?" for each item.

My Supervisor:

Asks my Advice	Y	N	?
Hard to Please	Y	N	?
Impolite	Y	N	?
Praises Good Work	Y	N	?
Tactful	Y	N	?
Influential	Y	N	?
Up-to-Date	Y	N	?
Doesn't Supervise Enough	Y	N	?
Quick-Tempered	Y	N	?
Tells me Where I Stand	Y	N	?
Annoying	Y	N	?
Stubborn	Y	N	?
Knows Job Well	Y	N	?
Bad	Y	N	?
Intelligent	Y	N	?
Leaves me on my Own	Y	N	?
Around when Needed	Y	N	?
Lazy	Y	N	?

20. In which of the following general areas do you think going to A School would have helped you do your present job better? Please check yes it would have helped or no it wouldn't have for each category.

CATEGORY	Yes	No
a. Record keeping	—	—
b. Meat cookery	—	—
c. Making sauces and gravies	—	—
d. Recipe conversion	—	—
e. Sanitation	—	—
f. Nutrition	—	—
g. Baking	—	—
h. Progressive cookery	—	—
i. Customer relations	—	—

21. Rank E -

22. Age Years

23. How long have you been in the Navy? Yrs. Mos.

24. How long have you been in Navy Food Service? Yrs. Mos.

25. Do you plan to reenlist when your present enlistment ends?
(please check one answer)

No, I will retire	Definitely no	Probably no	Undecided	Probably yes	Definitely yes
—	—	—	—	—	—

26. How much do you like the Navy?

Dislike very much	Dislike moderately	Dislike a little	Neutral	Like a little	Like moderately	Like very much
—	—	—	—	—	—	—

27. Before the present MS merger, would you have been called a

— Commissaryman (CS) or CS striker

— Steward (SD) or SD striker

— Neither or don't know

28. When you first started working in food service in the Navy, did you ask for that assignment?

YES NO

29. Did you have any civilian food service experience before coming into the Navy?

YES NO

30. What is the average number of hours you work in your food service job in a typical week?

 Hours

31. In general, do you think you work longer hours than other rates?

Much Longer	Longer	A bit Longer	About the Same	A bit Shorter	Shorter	Much Shorter
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— — — — — — —

32. Please briefly describe your present job.

33. Is there any other comment you would like to add about training for Navy food service?

APPENDIX B

APPENDIX B

U. S. NAVY TRAINING ATTITUDE SURVEY (WATCH CAPTAINS)

99

Watch Captain

U. S. Army Natick Development Center
Natick, Massachusetts

APPENDIX B

U. S. NAVY TRAINING ATTITUDE SURVEY

The U. S. Army Natick Development Center is working with the Navy to evaluate the training of food service personnel. You have been selected as part of the sample and will receive some forms to fill out. This particular form is a survey geared toward your attitudes about the food service training you have or have not received in the Navy. The responses you make on this survey will help the Navy decide what aspects of food service training should be changed. Please take your time, and answer each part of each question carefully and honestly.

You will notice that we ask for your social security number. This is to be used ONLY to match your answers on this survey with any of the other forms you fill out for us. The information will be treated as confidential, and no one on this ship or in the Navy will see your responses with your social security number or name attached.

* * * * *

1. Social Security Number _____
2. Please tell us how satisfied you are with your present job in the following categories. (Please check one answer for each category)

CATEGORY	Very	Happy	Slight-	Neu-	Slight-	Un-	Very
	Happy	Happy	ly Happy	tral	ly Un-	happy	Un-
a. OJT	—	—	—	—	—	—	—
b. Formal training you received for the job	—	—	—	—	—	—	—
c. Recognition for work done	—	—	—	—	—	—	—
d. Your co-workers	—	—	—	—	—	—	—
e. Adequacy of pay	—	—	—	—	—	—	—
f. Promotion opportunity	—	—	—	—	—	—	—
g. Adequate tools/supplies to do the job	—	—	—	—	—	—	—
h. Attitude of customers	—	—	—	—	—	—	—

3. For each of the following categories we would like to know how good the training you received was in preparing you for the job you presently do in the fleet. Notice that there are four types of training: No Training, Other Schools, C School, and OJT. If you have had no training at all in a category, you would put a check mark under No Training. JUST WATCHING SOMEONE AND "LEARNING" FROM THAT IS THE SAME AS NO TRAINING. If you had training in that category in Other Schools (i.e., A or B School, civilian food service schools, Navy short courses, etc.) you would put a check mark under Other Schools. Under the C School and OJT headings there are scales running from 1 to 7. The words corresponding to those numbers are:

1	2	3	4	5	6	7
Very Bad	Bad	Slightly Bad	Neither Bad nor Good	Slightly Good	Good	Very Good

If, in a given category, you received training in C School, you would circle the number corresponding to how good that training was in preparing you for your present work. If not trained in C School in that category, you would leave the 1 to 7 scale blank. You would answer in the same way under OJT if you had received OJT in that category. Remember that by OJT we mean a FORMAL program, not just learning from watching someone else.

EXAMPLE. The following worker was trained in sharpening knives in Joe's Cooking School, in C School, and Navy OJT. He feels that the training in C School was "Slightly Bad" in preparing him for his present job; and the OJT was "Good" in preparing him. He learned to prepare Baked Alaska by watching another Watch Captain. He learned to prepare Chili in A School. For knife sharpening he circles the appropriate numbers under C School and OJT, and checks under Other Schools. For Baked Alaska he checks under No Training. For Chili he checks under Other Schools. His questionnaire would look like this:

CATEGORY	No Training	Other Schools	C School	OJT
a. Knife sharpening	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
b. Prepare Baked Alaska	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
c. Prepare Chili	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7

CATEGORY	No Training	Other Schools	C School	OJT
a. Breakout for a day's menu	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
b. Stock control (high and low limits)	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7

	1 Very Bad	2 Bad	3 Slightly Bad	4 Neither Bad nor Good	5 Slightly Good	6 Good	7 Very Good
CATEGORY							
c. Egg and egg mixture cookery	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
d. Milk and cheese cookery	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
e. Meat cookery	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
f. Poultry cookery	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
g. Fish cookery	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
h. Making soups	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
i. Making gravies and sauces	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
j. Salad and salad dressing preparation	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
k. Bread and roll baking	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
l. Pie baking	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
m. Cake baking	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
n. Cake decoration	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
o. Making of ice cream	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
p. Special meals (flight and boat)	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
q. Progressive cookery	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
r. Nutrition	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
s. Recipe card conversion	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
t. Menu planning	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
u. Scheduling of work and equipment for a meal	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
v. Garnishing	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
w. Proper serving techniques	—	—	—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7	

	1 Very Bad	2 Bad	3 Slightly Bad	4 Neither Bad nor Good	5 Slightly Good	6 Good	7 Very Good
CATEGORY				No Train- ing	Other Schools	C School	OJT
x. Food presentation on serving line				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
y. Food Preparation Worksheet (NAVSUP 1090)				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
z. Serving of meals in wardroom				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
aa. Customer relations				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
bb. Use of cooking equipment				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
cc. Use of baking equipment				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
dd. Safety of food service equipment				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
ee. Sanitation of food service equipment				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
ff. Sanitation of galley, wardroom, and mess deck areas				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
gg. Prevention of food-borne illnesses				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
hh. Personal hygiene				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
ii. Rodent and insect control				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
jj. Field food service				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
kk. Duties of general mess personnel				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
ll. Duties of private mess personnel				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
mm. Supply department organization (afloat)				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7
nn. Customer food preferences				—	—	1 2 3 4 5 6 7	1 2 3 4 5 6 7

1	2	3	4	5	6	7
Very Bad	Bad	Slightly Bad	Neither Bad nor Good	Slightly Good	Good	Very Good

TO CATEGORY	No Train- ing	Other Schools	C School			OJT
			1	2	3	
oo. How to give OJT	—	—	1	2	3	4 5 6 7
pp. Records and returns	—	—	1	2	3	4 5 6 7

4. For the same categories listed in the last question, we now wish to know whether, considering what you do NOW in your job, you think you received too little, too much, or just the right amount of training in C School or OJT. For this question we have a new seven point scale:

1	2	3	4	5	6	7
Much too Little	Too Little	A bit too Little	Just About Right	A bit too Much	Too Much	Much too Much

If you are a C School graduate:

Based on what you do in your present job tell us how much training you received in C School for each category by circling the number on the scale, under C School, which best describes your feelings. Leave the OJT scales blank even if you received OJT in a category.

If you are NOT a C School graduate:

Based on what you do in your present job tell us how much OJT you have received for each category by circling the number on the scale, under OJT, which best describes your feelings. Leave the C School scales blank.

CATEGORY	C School	OJT
a. Breakout for a day's menu	1 2 3 4 5 6 7	1 2 3 4 5 6 7
b. Stock control (high and low limits)	1 2 3 4 5 6 7	1 2 3 4 5 6 7
c. Egg and egg mixture cookery	1 2 3 4 5 6 7	1 2 3 4 5 6 7
d. Milk and cheese cookery	1 2 3 4 5 6 7	1 2 3 4 5 6 7
e. Meat cookery	1 2 3 4 5 6 7	1 2 3 4 5 6 7
f. Poultry cookery	1 2 3 4 5 6 7	1 2 3 4 5 6 7

1 Much too Little	2 Too Little	3 A bit too Little	4 Just About Right	5 A bit too Much	6 Too Much	7 Much too Much
CATEGORY						
g. Fish cookery				1 2 3 4 5 6 7		1 2 3 4 5 6 7
h. Making soups				1 2 3 4 5 6 7		1 2 3 4 5 6 7
i. Making gravies and sauces				1 2 3 4 5 6 7		1 2 3 4 5 6 7
j. Salad and salad dressing preparation				1 2 3 4 5 6 7		1 2 3 4 5 6 7
k. Bread and roll baking				1 2 3 4 5 6 7		1 2 3 4 5 6 7
l. Pie baking				1 2 3 4 5 6 7		1 2 3 4 5 6 7
m. Cake baking				1 2 3 4 5 6 7		1 2 3 4 5 6 7
n. Cake decoration				1 2 3 4 5 6 7		1 2 3 4 5 6 7
o. Making of ice cream				1 2 3 4 5 6 7		1 2 3 4 5 6 7
p. Special meals (flight and boat)				1 2 3 4 5 6 7		1 2 3 4 5 6 7
q. Progressive cookery				1 2 3 4 5 6 7		1 2 3 4 5 6 7
r. Nutrition				1 2 3 4 5 6 7		1 2 3 4 5 6 7
s. Recipe card conversion				1 2 3 4 5 6 7		1 2 3 4 5 6 7
t. Menu planning				1 2 3 4 5 6 7		1 2 3 4 5 6 7
u. Scheduling of work and equipment for a meal				1 2 3 4 5 6 7		1 2 3 4 5 6 7
v. Garnishing				1 2 3 4 5 6 7		1 2 3 4 5 6 7
w. Proper serving techniques				1 2 3 4 5 6 7		1 2 3 4 5 6 7
x. Food presentation on serving line				1 2 3 4 5 6 7		1 2 3 4 5 6 7
y. Food Preparation Worksheet (NAVSUP 1090)				1 2 3 4 5 6 7		1 2 3 4 5 6 7
z. Serving of meals in wardroom				1 2 3 4 5 6 7		1 2 3 4 5 6 7
aa. Customer relations				1 2 3 4 5 6 7		1 2 3 4 5 6 7
bb. Use of cooking equipment				1 2 3 4 5 6 7		1 2 3 4 5 6 7

1 Much too Little	2 Too Little	3 A bit too Little	4 Just About Right	5 A bit too Much	6 Too Much	7 Much too Much
CATEGORY					C School	OJT
cc. Use of baking equipment				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
dd. Safety of food service equipment				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
ee. Sanitation of food service equipment				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
ff. Sanitation of galley, wardroom and mess deck areas				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
gg. Prevention of food-borne illnesses				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
hh. Personal hygiene				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
ii. Rodent and insect control				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
jj. Field food service				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
kk. Duties of general mess personnel				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
ll. Duties of private mess personnel				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
mm. Supply department organization (afloat)				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
nn. Customer food preferences				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
oo. How to give OJT				1 2 3 4 5 6 7	1 2 3 4 5 6 7	
pp. Records and returns				1 2 3 4 5 6 7	1 2 3 4 5 6 7	

5. If the Navy were to concentrate on giving extra or more training to one level of personnel only, which do you think it should be?

- Cook striker level.
- Cook level.
- Watch captain level.
- Senior MS level (Wardroom or Galley Supervisor).
- All four levels have equal need for more or extra training.

6. How would each of the following things affect your feeling toward making Navy Food Service a career? (Please check one for each category)

The chances I would make Navy Food Service a career would be:

CATEGORY	Much More Likely	More Likely	A bit More Likely	About the Same	A bit Less Likely	Less Likely	Much Less Likely
a. More duty in shore galley	—	—	—	—	—	—	—
b. More duty in galley at sea	—	—	—	—	—	—	—
c. More duty on carriers	—	—	—	—	—	—	—
d. Taking C Food Production course	—	—	—	—	—	—	—
e. Taking C Management course	—	—	—	—	—	—	—
f. Faster promotions	—	—	—	—	—	—	—
g. Taking short courses in Navy Food Service	—	—	—	—	—	—	—
h. Going back to two ratings -- CS and SD	—	—	—	—	—	—	—

7. How would you feel about the possibility of attending civilian food service courses as part of a Navy Food Service career pattern?

A. A short course (i.e., two weeks, a month, or two months) at a school like the Culinary Institute or Cornell.

Like Very Much **Like** **Like a Bit** **Don't Care**

B. A long course (i.e., one or two years for an A.A. degree) at a community college with a food service specialty.

Like Very Much **Like** **Like a Bit** **Don't Care**

8. In the laboratory at C School you generally used smaller equipment than is used in the fleet (it may also have been newer). In your opinion, how much better would the training be if the school used the same size and age equipment now used in the fleet?

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—

9. How much time is wasted, in your opinion, in C School either before classes in the morning or in "breaks" between classes?

A Very Great Amount	Quite A Bit	Some	Very Little	None
—	—	—	—	—

* * * * *

In this next series of questions (10 – 16) we are interested in your honest feelings about your work in Navy food service. Please read each item carefully and select the one alternative that **BEST** describes your current feelings.

10. On most days on your job, how often does time seem to drag for you?

- About half the day or more
- About 1/3 of the day
- About 1/4 of the day
- About 1/8 of the day
- Time never seems to drag

11. Some people are completely involved in their job -- they are absorbed in it day and night. For other people, their jobs are simply one of several interests. How involved do you feel in your job?

- Very little involved; my other interests are more absorbing.
- Slightly involved.
- Moderately involved; my job and my other interests are equally absorbing.
- Strongly involved.
- Very strongly involved; my work is the most absorbing influence in my life.

12. How often do you do some extra work for your job which isn't really required of you?

- Almost every day.
- Several times a week.
- About once a week.
- Once every few weeks.
- About once a month or less.

13. Would you say you work harder, less hard, or about the same as other people doing your type of work on this ship?

- Much harder than most others.
- A little harder than most others.
- About the same as most others.
- A little less hard than most others.
- Much less hard than most others.

14. In most job situations there are differences in the amount of time during which a worker can control his moment to moment activities. The rest is controlled by the tasks assigned him by supervisors. If you could plan your schedule, would you

- Replace or reeducate your supervisors so that they would give you more opportunity to control your own activities.
- Organize tasks differently so that you could have more opportunity to control your own activities.
- Make some changes in tasks or supervision so that you had more choice on what you were doing at a given moment.
- Change very little because the job itself limits any individual's control over his own activities.
- Change nothing because you already have enough control over your own activities.

15. In relation to the other people that you work with, to what degree do the day-to-day jobs assigned you require skill, responsibility, and independent thinking?

- Very much.
- Much.
- Average.
- Little.
- Very little.

16. During the time you have been a Navy food service worker, you have probably compared your job to similar jobs in the civilian world. If you could choose, would you

- Leave Navy food service and seek a civilian food service job.
- Leave Navy food service and seek a civilian non-food service job.
- Leave Navy food service and seek another Navy job.
- Consider leaving Navy food service, but stay a little while longer.
- Stay in Navy food service.

17. We would like you to use the set of items below to describe your immediate supervisor in your present job (your galley captain, chief MS, or whoever is the "boss" just highest over you). The items below each describe a supervisor. We want to know if they describe YOUR supervisor. If an item does describe your supervisor, circle the "Y" (yes) next to that item. If it does not describe your supervisor, circle the "N" (no). If you cannot decide or do not know what the item means, circle the "?". Please circle a "Y", "N", or "?" for each item.

My Supervisor:

Asks my Advice	Y	N	?
Hard to Please	Y	N	?
Impolite	Y	N	?
Praises Good Work	Y	N	?
Tactful	Y	N	?
Influential	Y	N	?
Up-to-Date	Y	N	?
Doesn't Supervise Enough	Y	N	?
Quick-Tempered	Y	N	?
Tells me Where I Stand	Y	N	?
Annoying	Y	N	?
Stubborn	Y	N	?
Knows Job Well	Y	N	?
Bad	Y	N	?
Intelligent	Y	N	?
Leaves me on my Own	Y	N	?
Around when Needed	Y	N	?
Lazy	Y	N	?

18. In which of the following general areas do you think going to C School would have helped you do your present job better? Please check yes it would have helped or no it wouldn't have for each category.

CATEGORY	Yes	No
a. Records and returns	—	—
b. Meat cookery	—	—
c. Making sauces and gravies	—	—
d. Recipe conversion	—	—
e. Sanitation	—	—
f. Nutrition	—	—
g. Baking	—	—
h. Progressive cookery	—	—
i. Customer relations	—	—

19. Rank E-

20. Age Years

21. How long have you been in the Navy? Yrs. Mos.

22. How long have you been in Navy Food Service? Yrs. Mos.

23. Do you plan to reenlist when your present enlistment ends?
(please check one answer)

No, I will retire	Definitely no	Probably no	Undecided	Probably yes	Definitely yes
—	—	—	—	—	—

24. How much do you like the Navy?

Dislike very much	Dislike moder- ately	Dislike a little	Neutral	Like a little	Like moder- ately	Like very much
—	—	—	—	—	—	—

25. Before the present MS merger, would you have been called a

— Commissaryman (CS) or CS striker

— Steward (SD) or SD striker

— Neither or don't know

26. When you first started working in food service in the Navy, did you ask for
that assignment?

YES NO

27. Did you have any civilian food service experience before coming into the Navy?

YES NO

28. What is the average number of hours you work in your food service job in
a typical week?

 Hours

29. In general, do you think you work longer hours than other rates?

Much Longer	Longer	A bit Longer	About the Same	A bit Shorter	Shorter	Much Shorter
—	—	—	—	—	—	—

30. Please briefly describe your present job.

31. Is there any other comment you would like to add about training for Navy food service?

APPENDIX C

SUPERVISOR EVALUATION OF NAVY FOOD SERVICE A SCHOOL

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**U.S. Army Natick Development Center
Natick, Massachusetts**

APPENDIX C

SUPERVISOR EVALUATION OF NAVY FOOD SERVICE A SCHOOL

The U.S. Army Natick Development Center is working with the Navy to evaluate the training of food service personnel. You have been selected as part of the sample. This form is a survey geared toward your attitudes about the food service training your personnel may or may not have received from the Navy food service schools. The responses you make on this survey will help the Navy to decide which aspects of food service training should be changed. Please take your time, and answer each part of each question carefully and honestly.

The information you provide us on this survey will be treated as confidential, and no one on your ship or in the Navy will see your responses with your name attached.

* * * * *

1. For each of the following categories, we would like to have your opinion of how good or bad A School training was for graduates who work or have worked for you in the fleet based on your experience with their performance on the job. We would like you to use the following seven point scale in your ratings:

1	2	3	4	5	6	7
Very Bad	Bad	Slightly Bad	Neither Bad nor Good	Slightly Good	Good	Very Good

For each category, please circle the number which best describes your opinion of A School training in that category, based on the performance of graduates who have worked for you.

CATEGORY	A School
	1 2 3 4 5 6 7
a. Breakout for a day's menu	1 2 3 4 5 6 7
b. Stowage of rations	1 2 3 4 5 6 7
c. Roasting meats	1 2 3 4 5 6 7

1	2	3	4	5	6	7
Very Bad	Bad	Slightly Bad	Neither Bad nor Good	Slightly Good	Good	Very Good

CATEGORY

**A
School**

d. Grilling meats	1 2 3 4 5 6 7
e. Poultry cookery	1 2 3 4 5 6 7
f. Fish cookery	1 2 3 4 5 6 7
g. Cheese and egg cookery	1 2 3 4 5 6 7
h. Making soups	1 2 3 4 5 6 7
i. Making gravies and sauces	1 2 3 4 5 6 7
j. Salad and salad dressing preparation	1 2 3 4 5 6 7
k. Bread and roll baking	1 2 3 4 5 6 7
l. Cake and pie baking	1 2 3 4 5 6 7
m. Special meals (flight and boat)	1 2 3 4 5 6 7
n. Progressive cookery	1 2 3 4 5 6 7
o. Recipe card conversion	1 2 3 4 5 6 7
p. Serving temperature of foods	1 2 3 4 5 6 7
q. Menu planning	1 2 3 4 5 6 7
r. Portion control	1 2 3 4 5 6 7
s. Nutrition	1 2 3 4 5 6 7
t. Food presentation on serving line	1 2 3 4 5 6 7
u. Inspection of food	1 2 3 4 5 6 7
v. Table setting	1 2 3 4 5 6 7
w. Serving of meals in wardroom	1 2 3 4 5 6 7

1	2	3	4	5	6	7
Very Bad	Bad	Slightly Bad	Neither Bad nor Good	Slightly Good	Good	Very Good

CATEGORY	A
	School
x. Scullery operations	1 2 3 4 5 6 7
y. Customer relations	1 2 3 4 5 6 7
z. Routine equipment maintenance	1 2 3 4 5 6 7
aa. Use of steam-jacketed kettles (coppers)	1 2 3 4 5 6 7
bb. Use of ovens	1 2 3 4 5 6 7
cc. Use of steamers	1 2 3 4 5 6 7
dd. Use of deep fat friers	1 2 3 4 5 6 7
ee. Use of electric griddles	1 2 3 4 5 6 7
ff. Use of bread-dough mixers	1 2 3 4 5 6 7
gg. Use of bake ovens	1 2 3 4 5 6 7
hh. Personal hygiene	1 2 3 4 5 6 7
ii. Names and descriptions of food-borne illnesses	1 2 3 4 5 6 7
jj. Sanitation of food service equipment	1 2 3 4 5 6 7
kk. Sanitation of wardroom, galley, mess deck area	1 2 3 4 5 6 7
ll. Record keeping	1 2 3 4 5 6 7
mm. Shipboard and food service organization	1 2 3 4 5 6 7
nn. Housekeeping	1 2 3 4 5 6 7
oo. Cake decorating	1 2 3 4 5 6 7

2. For the same categories, we now wish to know, considering what your personnel do or should be doing in their jobs, what areas are covered too much, too little, or just about right in A School. For this question we have a new seven point scale:

1	2	3	4	5	6	7
Much too Little	Too Little	A bit too Little	Just About Right	A bit too Much	Too Much	Much too Much

For each category, please circle the number which best describes your feelings about which categories the A School spends too much, too little, or just about the right amount of time covering.

CATEGORY	A School						
	1	2	3	4	5	6	7
a. Breakout for a day's menu	1	2	3	4	5	6	7
b. Stowage of rations	1	2	3	4	5	6	7
c. Roasting meats	1	2	3	4	5	6	7
d. Grilling meats	1	2	3	4	5	6	7
e. Poultry cookery	1	2	3	4	5	6	7
f. Fish cookery	1	2	3	4	5	6	7
g. Cheese and egg cookery	1	2	3	4	5	6	7
h. Making soups	1	2	3	4	5	6	7
i. Making gravies and sauces	1	2	3	4	5	6	7
j. Salad and salad dressing preparation	1	2	3	4	5	6	7
k. Bread and roll baking	1	2	3	4	5	6	7
l. Cake and pie baking	1	2	3	4	5	6	7
m. Special meals (flight and boat)	1	2	3	4	5	6	7

1 Much too Little	2 Too Little	3 A bit too Little	4 Just About Right	5 A bit too Much	6 Too Much	7 Much too Much
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CATEGORY	A School
n. Progressive cookery	1 2 3 4 5 6 7
o. Recipe card conversion	1 2 3 4 5 6 7
p. Menu planning	1 2 3 4 5 6 7
q. Serving temperature of foods	1 2 3 4 5 6 7
r. Portion control	1 2 3 4 5 6 7
s. Nutrition	1 2 3 4 5 6 7
t. Food presentation on serving line	1 2 3 4 5 6 7
u. Inspection of food	1 2 3 4 5 6 7
v. Table setting	1 2 3 4 5 6 7
w. Serving of meals in wardroom	1 2 3 4 5 6 7
x. Scullery operations	1 2 3 4 5 6 7
y. Customer relations	1 2 3 4 5 6 7
z. Routine equipment maintenance	1 2 3 4 5 6 7
aa. Use of steam-jacketed kettles (coppers)	1 2 3 4 5 6 7
bb. Use of ovens	1 2 3 4 5 6 7
cc. Use of steamers	1 2 3 4 5 6 7
dd. Use of deep fat friers	1 2 3 4 5 6 7
ee. Use of electric griddles	1 2 3 4 5 6 7
ff. Use of bread-dough mixers	1 2 3 4 5 6 7
gg. Use of bake ovens	1 2 3 4 5 6 7
hh. Personal hygiene	1 2 3 4 5 6 7
ii. Names and descriptions of food-borne illnesses	1 2 3 4 5 6 7

1	2	3	4	5	6	7
Much too Little	Too Little	A bit too Little	Just About Right	A bit too Much	Too Much	Much too Much

CATEGORY	A School						
	1	2	3	4	5	6	7
jj. Sanitation of food service equipment	1	2	3	4	5	6	7
kk. Sanitation of wardroom, galley, or mess deck areas	1	2	3	4	5	6	7
ll. Record keeping	1	2	3	4	5	6	7
mm. Shipboard and food service organization	1	2	3	4	5	6	7
nn. Housekeeping	1	2	3	4	5	6	7
oo. Cake decorating	1	2	3	4	5	6	7

3. In each of the following areas, do you think there is any difference between the A School graduate and the individual who didn't graduate from A School? Please check the one alternative that best describes your feeling about each category.

The A School graduate is:

	Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
a. Record keeping	—	—	—	—	—	—	—
b. Meat cookery	—	—	—	—	—	—	—
c. Making sauces and gravies	—	—	—	—	—	—	—
d. Recipe conversion	—	—	—	—	—	—	—
e. Sanitation	—	—	—	—	—	—	—
f. Baking	—	—	—	—	—	—	—
g. Nutrition	—	—	—	—	—	—	—
h. Progressive cookery	—	—	—	—	—	—	—
i. Customer relations	—	—	—	—	—	—	—
j. Motivation	—	—	—	—	—	—	—

4. Rank E -

5. Age Years

6. How long have you been in the Navy? Yrs. Mos.

7. How long have you been in Navy Food Service? Yrs. Mos.

8. Do you plan to reenlist when your present enlistment ends?
(please check one answer)

No, I will retire	Definitely no	Probably no	Undecided	Probably yes	Definitely yes
—	—	—	—	—	—

9. How much do you like the Navy?

Dislike very much	Dislike moderately	Dislike a little	Neutral	Like a little	Like moderately	Like very much
—	—	—	—	—	—	—

10. Before the present MS merger, would you have been called a

____ Commissaryman (CS) or CS striker

____ Steward (SD) or SD striker

____ Neither or don't know

11. When you first started working in food service in the Navy, did you ask for that assignment?

YES NO

12. Did you have any civilian food service experience before coming into the Navy?

YES NO

13. What is the average number of hours you work in your food service job in a typical week?

 Hours

14. In general, do you think you work longer hours than other rates?

Much Longer	Longer	A bit Longer	About the Same	A bit Shorter	Shorter	Much Shorter
—	—	—	—	—	—	—

APPENDIX D
U. S. NAVY TRAINING ATTITUDE SURVEY ("A" SCHOOL STUDENTS)

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A School Students

U.S. Army Natick Development Center
Natick, Massachusetts

APPENDIX D

U. S. NAVY TRAINING ATTITUDE SURVEY

The U.S. Army Natick Development Center is working with the Navy to evaluate the training of food service personnel. You have been selected as part of the sample. This particular form is a survey geared toward your attitudes about the food service training you have or have not received in the Navy. The responses you make on this survey will help the Navy decide what aspects of food service training should be changed. Please take your time and answer each part of each question carefully and honestly.

You will notice that we ask for your social security number. This is to be used ONLY to match your answers on this survey with other information available to us from the school (i.e., your course grades). The information will be treated as confidential, and no one at the school or in the Navy will see your responses with your name or social security number attached.

* * * * *

A. Social Security Number _____

B. Please tell us how satisfied you are with your present job in the following categories. (Please check one answer for each category)

CATEGORY	Very Happy	Happy	Slight- ly Happy	Neu- tral	Slight- ly Un- happy	Un- happy	Very Un- happy
1. Adequacy of pay	—	—	—	—	—	—	—
2. Training you received in A School	—	—	—	—	—	—	—
3. Your fellow students	—	—	—	—	—	—	—
4. Promotion opportunity	—	—	—	—	—	—	—

C. How much time is wasted, in your opinion, in A School either before classes in the morning or in "breaks" between classes?

A Very Great Amount	Quite A Bit	Some	Very Little	None
—	—	—	—	—

D. Listed below are a number of topics covered in the A School course you have just finished or are about to finish. For each of the topics we would like to know how well you feel it was covered in this course. Notice that we have three columns: one headed "Not Covered", one headed "How Well Covered", and a third headed "Shouldn't Cover". If the topic was not covered at all in your A School course, please put a check mark under "Not Covered". If it was covered, we want you to circle the number under "How Well Covered" corresponding to how well you feel it was covered. The words which correspond to the numbers are:

1	2	3	4	5	6	7
Very Poorly Covered	Poorly Covered	Slightly Poorly Covered	Neither Well nor Poorly Covered	Slightly Well Covered	Well Covered	Very Well Covered

Perhaps there were some topics which were covered which you think will not help you at all, or at best very little, in your assignment as a mess management specialist. Please put a check mark under the third column, "Shouldn't Cover" if you feel that a topic should not have been covered since it probably won't help you in your new assignment.

EXAMPLE. You were trained in sharpening knives in A School. You felt that the topic was well covered and that it will be useful to you in your job. For knife sharpening you would circle the 6 under "How Well Covered".

You were not trained at all in A School in preparing Baked Alaska and you do not feel it would have been useful for your new assignment. For Baked Alaska you would check under "Not Covered" and under "Shouldn't Cover".

You were trained in preparing Chili in A School and feel that the coverage was neither good nor bad, but feel that coverage of that topic will be useful to you in your job. For Chili you would circle the 4 under "How Well Covered".

Your answers would look like this:

TOPIC	Not Covered	How Well Covered	Shouldn't Cover
1. Knife Sharpening	—	1 2 3 4 5 6 7	—
2. Prepare Baked Alaska	—	1 2 3 4 5 6 7	—
3. Prepare Chili	—	1 2 3 4 5 6 7	—

1 Very Poorly Covered	2 Poorly Covered	3 Slightly Poorly Covered	4 Neither Well nor Poorly Covered	5 Slightly Well Covered	6 Well Covered	7 Very Well Covered
TOPIC				Not Covered	How Well Covered	Shouldn't Cover
1. Rules and regulations of the A School				—	1 2 3 4 5 6 7	—
2. School facilities available to students				—	1 2 3 4 5 6 7	—
3. Overview of the A School course on the first day of class				—	1 2 3 4 5 6 7	—
4. Shipboard organization				—	1 2 3 4 5 6 7	—
5. Shipboard operations (duty stations, drills, etc.)				—	1 2 3 4 5 6 7	—
6. Administration of officers' messes afloat				—	1 2 3 4 5 6 7	—
7. Administration of CPO messes afloat				—	1 2 3 4 5 6 7	—
8. Administration of private messes afloat				—	1 2 3 4 5 6 7	—
9. Organization of the general mess afloat				—	1 2 3 4 5 6 7	—
10. Duties of general mess personnel afloat				—	1 2 3 4 5 6 7	—
11. Basic mathematical calculations				—	1 2 3 4 5 6 7	—
12. Recipe conversion				—	1 2 3 4 5 6 7	—
13. Use of calculators				—	1 2 3 4 5 6 7	—
14. Food preservation and spoilage				—	1 2 3 4 5 6 7	—
15. Classification of bacteria				—	1 2 3 4 5 6 7	—

1 Very Poorly Covered	2 Poorly Covered	3 Slightly Poorly Covered	4 Neither Well nor Poorly Covered	5 Slightly Well Covered	6 Well Covered	7 Very Well Covered
TOPIC				Not Covered	How Well Covered	Shouldn't Cover
16. Chemical contamination of foods				1 2 3 4 5 6 7		
17. Sanitation of galley, wardroom and mess deck areas				1 2 3 4 5 6 7		
18. Theory of bacterial food poisoning				1 2 3 4 5 6 7		
19. Prevention of food-borne illness				1 2 3 4 5 6 7		
20. Control of rodents				1 2 3 4 5 6 7		
21. Control of insects				1 2 3 4 5 6 7		
22. Radiological decontamination				1 2 3 4 5 6 7		
23. Chemical and biological decontamination				1 2 3 4 5 6 7		
24. Scullery operations				1 2 3 4 5 6 7		
25. Methods of garbage disposal				1 2 3 4 5 6 7		
26. Use of ovens				1 2 3 4 5 6 7		
27. Use of steamers				1 2 3 4 5 6 7		
28. Use of deep fat friers				1 2 3 4 5 6 7		
29. Use of electric griddles				1 2 3 4 5 6 7		
30. Use of steam-jacketed kettles (coppers)				1 2 3 4 5 6 7		
31. Cleaning of galley equipment				1 2 3 4 5 6 7		
32. Maintenance of galley equipment				1 2 3 4 5 6 7		
33. Stowage of food items				1 2 3 4 5 6 7		

	1 Very Poorly Covered	2 Poorly Covered	3 Slightly Poorly Covered	4 Neither Well nor Poorly Covered	5 Slightly Well Covered	6 Well Covered	7 Very Well Covered
TOPIC				Not Covered	How Well Covered	Shouldn't Cover	
34. Nutrition	—	—	—	1 2 3 4 5 6 7	—	—	—
35. Menu planning	—	—	—	1 2 3 4 5 6 7	—	—	—
36. Forms and records in mess operation	—	—	—	1 2 3 4 5 6 7	—	—	—
37. Egg cookery	—	—	—	1 2 3 4 5 6 7	—	—	—
38. Milk and cheese cookery	—	—	—	1 2 3 4 5 6 7	—	—	—
39. Cereal and starch cookery	—	—	—	1 2 3 4 5 6 7	—	—	—
40. Use and preparation of beverages	—	—	—	1 2 3 4 5 6 7	—	—	—
41. Preparation of soups	—	—	—	1 2 3 4 5 6 7	—	—	—
42. Preparation of sauces	—	—	—	1 2 3 4 5 6 7	—	—	—
43. Preparation of gravies	—	—	—	1 2 3 4 5 6 7	—	—	—
44. Classification and selection of meats	—	—	—	1 2 3 4 5 6 7	—	—	—
45. Cutting of meats and poultry	—	—	—	1 2 3 4 5 6 7	—	—	—
46. Carving of meats and poultry	—	—	—	1 2 3 4 5 6 7	—	—	—
47. Grilling of meats	—	—	—	1 2 3 4 5 6 7	—	—	—
48. Roasting of meats	—	—	—	1 2 3 4 5 6 7	—	—	—
49. Poultry cookery	—	—	—	1 2 3 4 5 6 7	—	—	—
50. Thawing frozen meats	—	—	—	1 2 3 4 5 6 7	—	—	—
51. Classification of fish and seafood	—	—	—	1 2 3 4 5 6 7	—	—	—

1 Very Poorly Covered	2 Poorly Covered	3 Slightly Poorly Covered	4 Neither Well nor Poorly Covered	5 Slightly Well Covered	6 Well Covered	7 Very Well Covered
TOPIC				Not Covered	How Well Covered	Shouldn't Cover
52. Fish cookery				—	1 2 3 4 5 6 7	—
53. Vegetable cookery				—	1 2 3 4 5 6 7	—
54. Storage of fruits and vegetables				—	1 2 3 4 5 6 7	—
55. Preparation of salads				—	1 2 3 4 5 6 7	—
56. Preparation of salad dressings				—	1 2 3 4 5 6 7	—
57. Garnishing of foods				—	1 2 3 4 5 6 7	—
58. Use of bake ovens				—	1 2 3 4 5 6 7	—
59. Use of bread-dough mixer				—	1 2 3 4 5 6 7	—
60. Baking of breads and rolls				—	1 2 3 4 5 6 7	—
61. Sanitation in baking				—	1 2 3 4 5 6 7	—
62. Baking of specialty breads				—	1 2 3 4 5 6 7	—
63. Preparation of pie fillings				—	1 2 3 4 5 6 7	—
64. Pie baking				—	1 2 3 4 5 6 7	—
65. Cake baking				—	1 2 3 4 5 6 7	—
66. Cake frosting preparation				—	1 2 3 4 5 6 7	—
67. Cake decoration				—	1 2 3 4 5 6 7	—
68. Preparation of gelatins and puddings				—	1 2 3 4 5 6 7	—
69. Production of ice cream				—	1 2 3 4 5 6 7	—

	1 Very Poorly Covered	2 Poorly Covered	3 Slightly Poorly Covered	4 Neither Well nor Poorly Covered	5 Slightly Well Covered	6 Well Covered	7 Very Well Covered
TOPIC	Not Covered		How Well Covered		Shouldn't Cover		
70. Preparation of cookies	—		1 2 3 4 5 6 7		—		
71. Officers' uniforms and ranks	—		1 2 3 4 5 6 7		—		
72. Setting of wardroom tables	—		1 2 3 4 5 6 7		—		
73. Seating arrangements for officers	—		1 2 3 4 5 6 7		—		
74. Serving a meal, informal	—		1 2 3 4 5 6 7		—		
75. Serving a meal, formal	—		1 2 3 4 5 6 7		—		
76. Securing after a meal	—		1 2 3 4 5 6 7		—		

E. How would you feel about the possibility of attending civilian food service courses as part of a Navy Food Service career pattern?

A. A short course (i.e., two weeks, a month, or two months) at a school like the Culinary Institute or Cornell.

Like Very Much	Like	Like a Bit	Don't Care
----------------	------	------------	------------

B. A long course (i.e., one or two years for an A.A. degree) at a community college with a food service specialty.

Like Very Much	Like	Like a Bit	Don't Care
----------------	------	------------	------------

F. Please tell us how you feel about your classroom in the following categories by checking one answer for each category.

	Never	A Little Bit	Sometimes	Often	Always
Was your classroom ever:					
1. Too hot	—	—	—	—	—
2. Too cold	—	—	—	—	—
3. Too stuffy	—	—	—	—	—
4. Too crowded	—	—	—	—	—
5. Too dim	—	—	—	—	—
6. Too noisy	—	—	—	—	—
7. Was your seat comfortable	—	—	—	—	—
8. Was your desk big enough	—	—	—	—	—

G. The following categories refer to your instructors. Please tell us, in general, how good or bad they were in each category.

	Very bad	Bad	Slightly bad	Neither bad nor good	Slightly good	Good	Very good
1. Knowledge of their subject	—	—	—	—	—	—	—
2. Answering questions	—	—	—	—	—	—	—
3. Interesting	—	—	—	—	—	—	—
4. Easy to understand	—	—	—	—	—	—	—
5. Organized	—	—	—	—	—	—	—
6. Using visual aids	—	—	—	—	—	—	—

H. How good or bad were the handouts the instructors used. (Please check one answer for each category).

	Very bad	Bad	Slightly bad	Neither bad nor good	Slightly good	A Good	Very good
1. Up to date	—	—	—	—	—	—	—
2. Complete	—	—	—	—	—	—	—
3. Too Detailed	—	—	—	—	—	—	—
4. Easy to use	—	—	—	—	—	—	—
5. Interesting	—	—	—	—	—	—	—
6. Helpful	—	—	—	—	—	—	—

I. For the following categories please tell us whether the amount of time spent in your A School course was too short, too long, or just about right.

	Much too short	Too short	A bit too short	Just about right	A bit too long	Too long	Much too long
1. Amount of cooking laboratory	—	—	—	—	—	—	—
2. Amount of baking laboratory	—	—	—	—	—	—	—
3. Your homework assignments	—	—	—	—	—	—	—
4. The whole course	—	—	—	—	—	—	—

J. How often do you think students in the A School "coast through" the laboratories by allowing someone else in their 5 or 6 man laboratory team be the "boss" or do most of the work?

Never Very Little Sometimes Often Almost Always

— — — — —

K. How much better or worse would it be to place A School students, with their instructors as supervisors, in an actual galley.

A. Instead of the present school laboratory.

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—
—	—	—	—	—	—	—

B. In addition to the present school laboratory.

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—
—	—	—	—	—	—	—

L. Were your homework assignments helpful in learning the material for the course?

Worse than not helpful, they confused me	Not helpful	Slightly helpful	Helpful	Very helpful
—	—	—	—	—
—	—	—	—	—

M. Age _____ Years

N. Did you ask for assignment to food service A School?

YES _____ NO _____

O. Did you have any civilian food service experience before coming into the Navy?

YES _____ NO _____

P. So far, how much do you like the Navy?

Dislike very much	Dislike moderately	Dislike a little	Neutral	Like a little	Like moderately	Like very much
—	—	—	—	—	—	—
—	—	—	—	—	—	—

APPENDIX E
U. S. NAVY TRAINING ATTITUDE SURVEY ("C" SCHOOL STUDENTS)

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C School Students

**U.S. Army Natick Development Center
Natick, Massachusetts**

APPENDIX E

U.S. NAVY TRAINING ATTITUDE SURVEY

The U.S. Army Natick Development Center is working with the Navy to evaluate the training of food service personnel. You have been selected as part of the sample. This particular form is a survey geared toward your attitudes about the food service training you have or have not received in the Navy. The responses you make on this survey will help the Navy decide what aspects of food service training should be changed. Please take your time and answer each part of each question carefully and honestly.

You will notice that we ask for your social security number. This is to be used ONLY to match your answers on this survey with other information available to us from the school (i.e., your course grades). The information will be treated as confidential, and no one at the school or in the Navy will see your responses with your name or social security number attached.

* * * * *

A. Social Security Number _____

B. Please tell us how satisfied you are with your present assignment in the following categories. (Please check one answer for each category)

CATEGORY	Very	Happy	Slight-	Neu-	Slight-	Un-	Very
	Happy	Happy	ly Happy	tral	ly Un-	happy	Un-
1. Adequacy of pay	—	—	—	—	—	—	—
2. Training you received in C School	—	—	—	—	—	—	—
3. Your fellow students	—	—	—	—	—	—	—
4. Promotion opportunity	—	—	—	—	—	—	—

C. How much time is wasted, in your opinion, in C School either before classes in the morning or in "breaks" between classes?

A Very Great Amount	Quite A Bit	Some	Very Little	None
—	—	—	—	—

D. Listed below are a number of topics covered in the C School course you have just finished or are about to finish. For each of the topics we would like to know how well you feel it was covered in this course. Notice that we have two columns: one headed "Not Covered" and one headed "How Well Covered". If the topic was not covered at all in your C School course, please put a check mark under "Not Covered". If it was covered, we want you to circle the number under "How Well Covered" corresponding to how well you feel it was covered. The words which correspond to the numbers are:

1	2	3	4	5	6	7
Very Poorly Covered	Poorly Covered	Slightly Poorly Covered	Neither Well nor Poorly Covered	Slightly Well Covered	Well Covered	Very Well Covered

EXAMPLE. You were trained in sharpening knives in C School. You felt that the topic was well covered and that it will be useful to you in your job. For knife sharpening you would circle the 6 under "How Well Covered".

You were trained in A School, but not at all in C School, in preparing Baked Alaska. For Baked Alaska you would check under "Not Covered".

You were trained in preparing Chili in C School and feel the coverage was neither good nor bad. For Chili you would circle the 4 under "How Well Covered".

Your answers would look like this:

TOPIC	Not Covered	How Well Covered
1. Knife Sharpening	—	1 2 3 4 5 6 7
2. Preparing Baked Alaska	—	1 2 3 4 5 6 7
3. Preparing Chili	—	1 2 3 4 5 6 7

TOPIC	Not Covered	How Well Covered
1. Supply Department Organization (afloat)	—	1 2 3 4 5 6 7
2. Function of the Five Types of Private Mess	—	1 2 3 4 5 6 7
3. Duties of General Mess Personnel	—	1 2 3 4 5 6 7

1 Very Poorly Covered	2 Poorly Covered	3 Slightly Poorly Covered	4 Neither Well nor Poorly Covered	5 Slightly Well Covered	6 Well Covered	7 Very Well Covered
TOPIC						Not Covered
4. Duties of Private Mess Personnel						1 2 3 4 5 6 7
5. Stock Control (high and low limits)						1 2 3 4 5 6 7
6. Sanitation of Food Service Equipment						1 2 3 4 5 6 7
7. Safety of Food Service Equipment						1 2 3 4 5 6 7
8. Use of Ovens						1 2 3 4 5 6 7
9. Use of Steamers						1 2 3 4 5 6 7
10. Use of Deep Fat Friers						1 2 3 4 5 6 7
11. Use of Electric Griddles						1 2 3 4 5 6 7
12. Use of Steam-Jacketed Kettles (coppers)						1 2 3 4 5 6 7
13. Use of Bread-Dough Mixers						1 2 3 4 5 6 7
14. Use of Bake Ovens						1 2 3 4 5 6 7
15. Field Feeding						1 2 3 4 5 6 7
16. Names and Descriptions of Food-Borne Illnesses						1 2 3 4 5 6 7
17. Prevention of Food-Borne Illnesses						1 2 3 4 5 6 7
18. Rodent and Insect Control						1 2 3 4 5 6 7
19. Personal Hygiene						1 2 3 4 5 6 7
20. Food Service Operations in Radiation, Biological and Chemical Contamination						1 2 3 4 5 6 7
21. Nutrition						1 2 3 4 5 6 7
22. Basic Food Groups						1 2 3 4 5 6 7
23. Menu Planning						1 2 3 4 5 6 7
24. Recipe Conversion						1 2 3 4 5 6 7

1 Very Poorly Covered	2 Poorly Covered	3 Slightly Poorly Covered	4 Neither Well nor Poorly Covered	5 Slightly Well Covered	6 Well Covered	7 Very Well Covered
TOPIC					Not Covered	How Well Covered
25. Food Preparation Worksheet (NAVSUP 1090)					—	1 2 3 4 5 6 7
26. Egg and Egg Mixture Cookery					—	1 2 3 4 5 6 7
27. Use of Beverages and Milk					—	1 2 3 4 5 6 7
28. Milk and Cheese Cookery					—	1 2 3 4 5 6 7
29. Cereal and Starch Cookery					—	1 2 3 4 5 6 7
30. Cuts and Types of Meat					—	1 2 3 4 5 6 7
31. Meat Thawing					—	1 2 3 4 5 6 7
32. Progressive Cookery					—	1 2 3 4 5 6 7
33. Meat and Poultry Carving					—	1 2 3 4 5 6 7
34. Poultry Cookery					—	1 2 3 4 5 6 7
35. Fish and Shellfish Cookery					—	1 2 3 4 5 6 7
36. Principles of Handling Fish					—	1 2 3 4 5 6 7
37. Use of Custom Foods					—	1 2 3 4 5 6 7
38. Preparation of Soups					—	1 2 3 4 5 6 7
39. Preparation of Sauces and Gravies					—	1 2 3 4 5 6 7
40. Vegetable Cookery					—	1 2 3 4 5 6 7
41. Preparation of Salads					—	1 2 3 4 5 6 7
42. Preparation of Salad Dressings					—	1 2 3 4 5 6 7
43. Preparation of Gelatins and Puddings					—	1 2 3 4 5 6 7
44. Arrangement of Food on Serving Line					—	1 2 3 4 5 6 7
45. Garnishing of Food					—	1 2 3 4 5 6 7
46. Proper serving Techniques					—	1 2 3 4 5 6 7

1	2	3	4	5	6	7
Very Poorly Covered	Poorly Covered	Slightly Poorly Covered	Neither Well nor Poorly Covered	Slightly Well Covered	Well Covered	Very Well Covered

TOPIC	Not Covered	How Well Covered
47. Bread Baking	_____	1 2 3 4 5 6 7
48. Preparation of Quick Breads	_____	1 2 3 4 5 6 7
49. Preparation of Pie Fillings	_____	1 2 3 4 5 6 7
50. Pie Bakery	_____	1 2 3 4 5 6 7
51. Manufacture of Ice Cream	_____	1 2 3 4 5 6 7
52. Cake Bakery	_____	1 2 3 4 5 6 7
53. Frosting Preparation	_____	1 2 3 4 5 6 7
54. Cake Decorating	_____	1 2 3 4 5 6 7
55. Preparation of Sweet Doughs	_____	1 2 3 4 5 6 7
56. Cookie Baking	_____	1 2 3 4 5 6 7
57. Scheduling of Work and Equipment for a Meal	_____	1 2 3 4 5 6 7
58. Customer Relations	_____	1 2 3 4 5 6 7
59. Serving Meals in Wardroom	_____	1 2 3 4 5 6 7
60. Customer Food Preferences	_____	1 2 3 4 5 6 7
61. How to Give OJT	_____	1 2 3 4 5 6 7

E. For the same categories listed in the last question, we now wish to know whether, considering what you know about what a watch captain level individual does in the fleet, you think you received too little, too much, or just the right amount of training in this C School course. For this question we have a new seven point scale:

1	2	3	4	5	6	7
Much too Little	Too Little	A bit too Little	Just About Right	A bit too Much	Too Much	Much too Much

Please circle the number which best describes how much or how little training you received in this course for what you feel you would have to do in a watch captain level position in the fleet.

1 Much too Little	2 Too Little	3 A bit too Little	4 Just About Right	5 A bit too Much	6 Too Much	7 Much too Much
----------------------------	--------------------	-----------------------------	-----------------------------	---------------------------	------------------	--------------------------

TOPIC	How Much Training Received
1. Supply Department Organization (afloat)	1 2 3 4 5 6 7
2. Function of the Five Types of Private Mess	1 2 3 4 5 6 7
3. Duties of General Mess Personnel	1 2 3 4 5 6 7
4. Duties of Private Mess Personnel	1 2 3 4 5 6 7
5. Stock Control (high and low limits)	1 2 3 4 5 6 7
6. Sanitation of Food Service Equipment	1 2 3 4 5 6 7
7. Safety of Food Service Equipment	1 2 3 4 5 6 7
8. Use of Ovens	1 2 3 4 5 6 7
9. Use of Steamers	1 2 3 4 5 6 7
10. Use of Deep Fat Friers	1 2 3 4 5 6 7
11. Use of Electric Griddles	1 2 3 4 5 6 7
12. Use of Steam-Jacketed Kettles (coppers)	1 2 3 4 5 6 7
13. Use of Bread-Dough Mixers	1 2 3 4 5 6 7
14. Use of Bake Ovens	1 2 3 4 5 6 7
15. Field Feeding	1 2 3 4 5 6 7
16. Names and Descriptions of Food-Borne Illnesses	1 2 3 4 5 6 7
17. Prevention of Food-Borne Illnesses	1 2 3 4 5 6 7
18. Rodent and Insect Control	1 2 3 4 5 6 7
19. Personal Hygiene	1 2 3 4 5 6 7
20. Food Service Operations in Radiation, Biological, and Chemical Contamination	1 2 3 4 5 6 7
21. Nutrition	1 2 3 4 5 6 7
22. Basic Food Groups	1 2 3 4 5 6 7

1	2	3	4	5	6	7
Much too Little	Too Little	A bit too Little	Just About Right	A bit too Much	Too Much	Much too Much

TOPIC	How Much Training Received
23. Menu Planning	1 2 3 4 5 6 7
24. Recipe Conversion	1 2 3 4 5 6 7
25. Food Preparation Worksheet (NAVSUP 1090)	1 2 3 4 5 6 7
26. Egg and Egg Mixture Cookery	1 2 3 4 5 6 7
27. Use of Beverages and Milk	1 2 3 4 5 6 7
28. Milk and Cheese Cookery	1 2 3 4 5 6 7
29. Cereal and Starch Cookery	1 2 3 4 5 6 7
30. Cuts and Types of Meats	1 2 3 4 5 6 7
31. Meat Thawing	1 2 3 4 5 6 7
32. Progressive Cookery	1 2 3 4 5 6 7
33. Meat and Poultry Carving	1 2 3 4 5 6 7
34. Poultry Cookery	1 2 3 4 5 6 7
35. Fish and Shellfish Cookery	1 2 3 4 5 6 7
36. Principles of Handling Fish	1 2 3 4 5 6 7
37. Use of Custom Foods	1 2 3 4 5 6 7
38. Preparation of Soups	1 2 3 4 5 6 7
39. Preparation of Sauces and Gravies	1 2 3 4 5 6 7
40. Vegetable Cookery	1 2 3 4 5 6 7
41. Preparation of Salads	1 2 3 4 5 6 7
42. Preparation of Salad Dressings	1 2 3 4 5 6 7
43. Preparation of Gelatins and Puddings	1 2 3 4 5 6 7
44. Arrangement of Food on Serving Line	1 2 3 4 5 6 7
45. Garnishing of Food	1 2 3 4 5 6 7

1	2	3	4	5	6	7
Much too	Too Little	A bit too Little	Just About Right	A bit too Much	Too Much	Much too Much
Little						

TOPIC	How Much Training Received
46. Proper Serving Techniques	1 2 3 4 5 6 7
47. Bread Baking	1 2 3 4 5 6 7
48. Preparation of Quick Breads	1 2 3 4 5 6 7
49. Preparation of Pie Fillings	1 2 3 4 5 6 7
50. Pie Bakery	1 2 3 4 5 6 7
51. Manufacture of Ice Cream	1 2 3 4 5 6 7
52. Cake Bakery	1 2 3 4 5 6 7
53. Frosting Preparation	1 2 3 4 5 6 7
54. Cake Decorating	1 2 3 4 5 6 7
55. Preparation of Sweet Doughs	1 2 3 4 5 6 7
56. Cookie Baking	1 2 3 4 5 6 7
57. Scheduling of Work & Equipment for a Meal	1 2 3 4 5 6 7
58. Customer Relations	1 2 3 4 5 6 7
59. Serving Meals in Wardroom	1 2 3 4 5 6 7
60. Customer Food Preferences	1 2 3 4 5 6 7
61. How to Give OJT	1 2 3 4 5 6 7

F. How would you feel about the possibility of attending civilian food services courses as part of a Navy Food Service career pattern?

1. A short course (i.e., two weeks, a month, or two months) at a school like the Culinary Institute or Cornell.

Like Very Much

Like

Like a Bit

Don't Care

2. A long course (i.e., one or two years for an A.A. degree) at a community college with a food service specialty.

Like Very Much	Like	Like a Bit	Don't Care
—	—	—	—

very	—	—	—
bad	—	—	—
good	—	—	—

G. Please tell us how you feel about your classroom in the following categories by checking one answer for each category.

Never	A Little Bit	Sometimes	Often	Always
-------	--------------	-----------	-------	--------

Was your classroom ever:

1. Too hot	—	—	—	—	—
2. Too cold	—	—	—	—	—
3. Too stuffy	—	—	—	—	—
4. Too crowded	—	—	—	—	—
5. Too dim	—	—	—	—	—
6. Too noisy	—	—	—	—	—
7. Was your seat comfortable	—	—	—	—	—
8. Was your desk big enough	—	—	—	—	—

H. The following categories refer to your instructors. Please tell us, in general, how good or bad they were in each category.

	Very bad	Bad	Slightly bad	Neither bad nor good	Slightly good	Good	Very good
1. Knowledge of their subject	—	—	—	—	—	—	—
2. Answering questions	—	—	—	—	—	—	—
3. Interesting	—	—	—	—	—	—	—
4. Easy to understand	—	—	—	—	—	—	—
5. Organized	—	—	—	—	—	—	—
6. Using visual aids	—	—	—	—	—	—	—

I. How good or bad were the handouts the instructors used. (Please check one answer for each category.)

	Very bad	Bad	Slightly bad	Neither bad nor good	Slightly good	Good	Very good
1. Up to Date	—	—	—	—	—	—	—
2. Complete	—	—	—	—	—	—	—
3. Too Detailed	—	—	—	—	—	—	—
4. Easy to Use	—	—	—	—	—	—	—
5. Interesting	—	—	—	—	—	—	—
6. Helpful	—	—	—	—	—	—	—

J. For the following categories please tell us whether the amount of time spent in your C School course was too short, too long, or just about right.

	Much too short	Too short	A bit too short	Just about right	A bit too long	Too long	Much too long
1. Amount of cooking laboratory	—	—	—	—	—	—	—
2. Amount of baking laboratory	—	—	—	—	—	—	—
3. Your homework assignments	—	—	—	—	—	—	—
4. The whole course	—	—	—	—	—	—	—

K. How often do you think students in the C School "coast through" the laboratories by allowing someone else in their 5 or 6 man laboratory team to be the "boss" or do most of the work?

Never	Very Little	Sometimes	Often	Almost Always
—	—	—	—	—

L. Were your homework assignments helpful in learning the material for the course?

Worse than not helpful, they confused me	Not helpful	Slightly helpful	Helpful	Very helpful
--	-------------	------------------	---------	--------------

M. Rank E -

N. Age Years

O. How long have you been in the Navy? Years Months

P. How long have you been in Navy Food Service? Yrs. Mos.

Q. Do you plan to reenlist when your present enlistment ends? (Please check one answer.)

No, I will retire	Definitely no	Probably no	Undecided	Probably yes	Definitely yes
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R. How much do you like the Navy?

Dislike very much	Dislike moderately	Dislike a little	Neutral	Like a little	Like moderately	Like very much
-------------------	--------------------	------------------	---------	---------------	-----------------	----------------

S. Before the present MS merger, would you have been called a

 Commissaryman (CS) or CS striker

 Steward (SD) or SD striker

 Neither or don't know

T. When you first started working in food service in the Navy, did you ask for that assignment?

 YES NO

U. Did you have any civilian food service experience before coming into the Navy?

 YES NO

V. In general, do you think you work longer hours than other rates?

Much Longer A bit Longer About the Same A bit Shorter Shorter Much Shorter

W. Is there any other comment you would like to add about training for Navy Food Service?

APPENDIX

FOOD SERVICE INSTRUCTOR INTERVIEW

NATICK DEVELOPMENT CENTER

APPENDIX F

FOOD SERVICE INSTRUCTOR INTERVIEW

1. Please tell us how satisfied you are with your present job in the following categories. (Please check one answer for each category.)

CATEGORY	Very Satisfied	Satisfied	Slightly Satisfied	Neutral	Slightly Dissatisfied	Dis-satisfied	Very Dissatisfied
a. Formal training you received for the job	—	—	—	—	—	—	—
b. Recognition for work done	—	—	—	—	—	—	—
c. Promotion	—	—	—	—	—	—	—
d. Adequate tools/supplies to do the job	—	—	—	—	—	—	—
e. Attitude of students	—	—	—	—	—	—	—
f. Working conditions (hours, etc.)	—	—	—	—	—	—	—
g. OVERALL	—	—	—	—	—	—	—

2. In your opinion, how well does C Management School prepare graduates to be leading MS's in the following categories?

CATEGORY	Very Well	Well	Slightly Well	Neutral	Slightly Poorly	Poorly	Very Poorly
a. Menu planning	—	—	—	—	—	—	—
b. Supervisory skills	—	—	—	—	—	—	—
c. Scheduling of personnel	—	—	—	—	—	—	—
d. Record keeping	—	—	—	—	—	—	—
e. Sanitation	—	—	—	—	—	—	—
f. Organizing divisional training	—	—	—	—	—	—	—

3. In your opinion, how well does A School prepare cooks and strikers, particularly at the E-3, E-4 level, in the following categories?

CATEGORY	Very Well	Well	Slightly Well	Neutral	Slightly Poorly	Poorly	Very Poorly
a. Cooking	—	—	—	—	—	—	—
b. Baking	—	—	—	—	—	—	—
c. Sanitation	—	—	—	—	—	—	—
d. Personal hygiene	—	—	—	—	—	—	—
e. Nutrition	—	—	—	—	—	—	—
f. Use of food service equipment	—	—	—	—	—	—	—
g. Preventive maintenance	—	—	—	—	—	—	—
h. Recipe conversion	—	—	—	—	—	—	—
i. Customer relations	—	—	—	—	—	—	—
j. Safety	—	—	—	—	—	—	—
k. Storage and breakout	—	—	—	—	—	—	—

4. Again based on your opinion, how well does C Food Production School prepare graduates for their jobs as watch captains in the following categories?

CATEGORY	Very Well	Well	Slightly Well	Neutral	Slightly Poorly	Poorly	Very Poorly
a. Cooking	—	—	—	—	—	—	—
b. Baking	—	—	—	—	—	—	—
c. Sanitation	—	—	—	—	—	—	—
d. Nutrition	—	—	—	—	—	—	—
e. Use of food service equipment.	—	—	—	—	—	—	—
f. Preventive maintenance	—	—	—	—	—	—	—
g. Progressive cookery	—	—	—	—	—	—	—
h. Customer relations	—	—	—	—	—	—	—
i. How to give OJT	—	—	—	—	—	—	—

4. (cont'd). how well C Food Production School prepares watch captains.

CATEGORY	Very Well	Well	Slightly Well	Neutral	Slightly Poorly	Poorly	Very Poorly
j. Safety	—	—	—	—	—	—	—
k. Watch supervision	—	—	—	—	—	—	—
l. Record keeping	—	—	—	—	—	—	—

5. Please rank order the following levels of personnel in terms of how well you feel they are trained in general (write "1" next to the best trained group as a whole, "3" next to the least well trained of the three, and "2" next to the group you would rate in the middle).

Cook/Striker level _____

Watch captain level _____

Leading MS level _____

6. How do you feel about the possibility of Navy MS's attending civilian food service courses as part of a Navy Food Service Career pattern?

A. A short course (i.e., two weeks, a month, or 2 months maximum) at a school like the Culinary Institute or Cornell University.

Dislike very much	Dislike moderately	Dislike a little	Neutral	Like a little	Like moderately	Like very much
—	—	—	—	—	—	—

B. A long course (i.e., one or two years for an A.A. degree) at a community college with a food service specialty.

Dislike very much	Dislike moderately	Dislike a little	Neutral	Like a little	Like moderately	Like very much
—	—	—	—	—	—	—

7. How much time do you feel the A School student should spend in cooking laboratory compared to the one week he now spends?

He should spend:

Much more	More	Slightly more	About the same	Slightly less	Less	Much less
—	—	—	—	—	—	—

8. How much better or worse would it be to place A School students, with their instructors as supervisors, in an actual galley. . . .

A. Instead of the present school laboratory

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—

B. In addition to the present school laboratory.

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—

APPENDIX G: *Sample letter to local government asking to extend the SydW*

APPENDIX G

INSTRUCTOR INTERVIEW - 2

ni ganteng, tetapi hasilnya pun tidak ada. Saya pun bertemu dengan seorang yang dikenal sebagai Pak Suryadi yang merupakan seorang pengusaha besar di kota

PROCEEDING PAGE THREE

NATICK DEVELOPMENT CENTER

APPENDIX G

INSTRUCTOR INTERVIEW - 2

1. You said that overall you were ____ with your job; how could it be made better?
2. How did your assignment as an instructor come about?
3. You said you were ____ with your instructor training; is there any way it could have been made better?
4. Is your instruction evaluated here at the school? Should it be? How effective is the evaluation?
5. Is being a school instructor good for your career? Why (not)?
6. Would you prefer a longer or shorter tour as an instructor? How much? Why?
7. Could the cooking laboratory be entirely eliminated from the A School course and still have the course produce a qualified graduate to send to the fleet? Why (not)?
8. A few sources have pinpointed the watch captain or middle management level to be a major problem in the fleet. Do you agree? If so, how would you suggest dealing with the problem?
9. Several MS's we surveyed expressed a strong interest in taking Navy short courses in food service. Do you think this is a good idea? If so, how would you suggest conducting them? (If they don't volunteer it, probe concerning the possibility of 1 or 2 week courses at fleet schools in major ports and/or FMT's conducting short courses.)

A SCHOOL INSTRUCTORS ONLY

10. Based on what the A School graduate does in his job in the first year after graduation, are there any areas you feel should be eliminated from or taught less in A School?
11. Are there any areas A School should add or spend more time teaching?
12. For each of the following would you tell me whether you feel more training in A School would be relevant, based again on the work graduates will be doing? (Only ask those not mentioned above).
 - a. cake decorating
 - b. customer relations
 - c. record keeping
 - d. preventive maintenance
 - e. menu planning
13. The school laboratory equipment is smaller than the galley equipment used in the fleet. Would using full-size equipment in the laboratory make any difference in the quality of the training?

A INSTRUCTORS ONLY

14. PROBE ABOUT Q's 7 and 8 in the other part of the interview.

For Q 7) (Only if S responds on "more" side) How much more time could a student spend in the cooking laboartory? Assuming total course time couldn't be increased, what area or areas would you take time from -- or would you say that under those conditions laboratory time would have to remain the same as it is now?

For Q 8) (For both parts A & B if S responds either on the "better" or "worse" side) Why is placing students in an actual galley better/worse?

(If "better" in either part of question) How long should the time in the actual galley be?

C FOOD PRODUCTION INSTRUCTORS ONLY

15. Based on what the C Food Production School graduate does in his job, are there any areas you feel should be eliminated from or taught less in the school?

16. Are there any areas C Food Production School should add or spend more time teaching?

17. For each of the following would you tell me whether you feel more training in C Food Production School would be relevant based on what graduates do in the fleet? (Only ask those not mentioned above)

a. cake decorating b. baking c. customer relations d. record keeping
e. preventive maintenance f. how to give OJT g. watch leadership

C MANAGEMENT INSTRUCTORS ONLY

18. Based on what the C Management School graduate does in his job, are there any areas you feel should be eliminated from or taught less in the school?

19. Are there any areas C Management School should add or spend more time teaching?

ALL RESPONDENTS

20. In the current laboratory situation at the school, the student is trained in a 5- or 6-man group at a given piece of equipment. Do you feel that this is better than having each person work on his own at a piece of equipment? Why? (If S prefers individual on his own) Can you think of any way to accomplish this in the present school framework?

21. We have been asked to design a feedback form for your graduates or their supervisors to send back to the school concerning the effectiveness of training. Would such a system be of any practical use? Why (not)?

22. If such a feedback system were implemented . . .
Should it be for the A School only or all schools?
Should the form be for the graduate, his supervisor, or both to fill out?
How long after graduation should it be sent out?
What kinds of feedback information could the school use?

23. In your opinion, what is the major problem in the fleet that training should be concerned with?

Y110 BROTHURTH: MONTGOMERY, DON D

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education out of touch in most departments of schools look now from you

and from them to the schools board members board O more you want to
be concerned about what you're doing in the schools

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Y110 BROTHURTH: MONTGOMERY, DON D

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STIMSON, J. A

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from school to school to exchange information between the school

ANNUAL DOCUMENT CENTER

APPENDIX H

FOOD MANAGEMENT TEAM INTERVIEW

anwendung setzt sich das neue System mit den neuen Bedürfnissen von den Nutzern ein. Es ist eine zentrale Rolle, die die Nutzer im Prozess einnehmen, um sicherzustellen, dass die Anwendung den tatsächlichen Bedürfnissen der Nutzer entspricht.

Was ist die Vorgehensweise, um sicherzustellen, dass die Anwendung den tatsächlichen Bedürfnissen der Nutzer entspricht?

Um sicherzustellen, dass die Anwendung den tatsächlichen Bedürfnissen der Nutzer entspricht, wird eine detaillierte Analyse der Nutzerbedürfnisse durchgeführt. Dies umfasst die Identifizierung der Anwendungsfälle, die die Nutzer im Alltag haben, und die Identifizierung der Anwendungsfälle, die die Nutzer im Alltag haben.

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APPENDIX H

FOOD MANAGEMENT TEAM INTERVIEW

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NATICK DEVELOPMENT CENTER

APPENDIX H

FOOD MANAGEMENT TEAM INTERVIEW

1. Please tell us how satisfied you are with your present job in the following categories. (Please check one answer for each category.)

CATEGORY	Very Satisfied	Satisfied	Slightly Satisfied	Neutral	Slightly Dissatisfied	Dissatisfied	Very Dissatisfied
a. Training you received for the job	—	—	—	—	—	—	—
b. Recognition for work done	—	—	—	—	—	—	—
c. Working conditions (i.e., travel, working hours)	—	—	—	—	—	—	—
d. Attitude of food service personnel you train	—	—	—	—	—	—	—
e. Support from ships in implementing your recommendations	—	—	—	—	—	—	—

2. In your opinion, how well does C Management School prepare graduates to be leading MS's in the following categories?

CATEGORY	Very Well	Well	Slightly Well	Neutral	Slightly Poorly	Poorly	Very Poorly
a. Menu planning	—	—	—	—	—	—	—
b. Supervisory skills	—	—	—	—	—	—	—
c. Scheduling of personnel	—	—	—	—	—	—	—
d. Record keeping	—	—	—	—	—	—	—
e. Sanitation	—	—	—	—	—	—	—
f. Organizing divisional training	—	—	—	—	—	—	—

3. In your opinion, how well does A School prepare cooks and strikers, particularly at the E-3, E-4 level, in the following categories?

CATEGORY	Very Well	Well	Slightly Well	Neutral	Slightly Poorly	Poorly	Very Poorly
a. Cooking	—	—	—	—	—	—	—
b. Baking	—	—	—	—	—	—	—
c. Sanitation	—	—	—	—	—	—	—
d. Personal hygiene	—	—	—	—	—	—	—
e. Nutrition	—	—	—	—	—	—	—
f. Use of food service equipment	—	—	—	—	—	—	—
g. Preventive maintenance	—	—	—	—	—	—	—
h. Recipe conversion	—	—	—	—	—	—	—
i. Customer relations	—	—	—	—	—	—	—
j. Safety	—	—	—	—	—	—	—
k. Storage and breakout	—	—	—	—	—	—	—

4. Again based on your opinion, how well does C Food Production School prepare graduates for their jobs as watch captains in the following categories?

CATEGORY	Very Well	Well	Slightly Well	Neutral	Slightly Poorly	Poorly	Very Poorly
a. Cooking	—	—	—	—	—	—	—
b. Baking	—	—	—	—	—	—	—
c. Sanitation	—	—	—	—	—	—	—
d. Nutrition	—	—	—	—	—	—	—
e. Use of food service equipment	—	—	—	—	—	—	—
f. Preventive maintenance	—	—	—	—	—	—	—
g. Progressive cookery	—	—	—	—	—	—	—
h. Customer relations	—	—	—	—	—	—	—
i. How to give OJT	—	—	—	—	—	—	—

4. (cont'd). how well C Food Production School prepares watch captains.

CATEGORY	Very Well	Well	Slightly Well	Neutral	Slightly Poorly	Poorly	Very Poorly
j. Safety	—	—	—	—	—	—	—
k. Watch supervision	—	—	—	—	—	—	—
l. Record keeping	—	—	—	—	—	—	—

5. Please rank order the following levels of personnel in terms of how well you feel they are trained in general (write "1" next to the best trained group as a whole, "3" next to the least well trained of the three, and "2" next to the group you would rate in the middle).

Cook/Striker level

Watch captain level

Leading MS level

6. How do you feel about the possibility of Navy MS's attending civilian food service courses as part of a Navy Food Service Career pattern?

A. A short course (i.e., two weeks, a month, or 2 months maximum) at a school like the Culinary Institute or Cornell University.

Dislike very much	Dislike moder- ately	Dislike a little	Neutral	Like a little	Like moder- ately	Like very much
—	—	—	—	—	—	—

B. A long course (i.e., one or two years for an A.A. degree) at a community college with a food service specialty.

Dislike very much	Dislike moder- ately	Dislike a little	Neutral	Like a little	Like moder- ately	Like very much
—	—	—	—	—	—	—

7. How much time do you feel the A School student should spend in cooking laboratory compared to the one week he now spends?

He should spend:

Much more	More	Slightly more	About the same	Slightly less	Less	Much less
—	—	—	—	—	—	—

8. Using the scale shown below, please rate the following factors in terms of how important you feel each is to the success of a food service operation in the fleet. Please circle the appropriate number for each factor. The words that go with the numbers are:

Unimportant	Slightly Important	Somewhat Important	Fairly Important	Very Important	Extremely Important
U	1	2	3	4	5

- a. The condition of equipment or utensils U 1 2 3 4 5
- b. Food service officer experience or education U 1 2 3 4 5
- c. Sanitary conditions in the galley and dining area U 1 2 3 4 5
- d. The skill level of cooks U 1 2 3 4 5
- e. Leadership of middle level and senior MS's U 1 2 3 4 5
- f. Support and cooperation of fellow MS's on board U 1 2 3 4 5
- g. Interest and support of the Commanding Officer U 1 2 3 4 5
- h. Interest and support of the Supply Officer U 1 2 3 4 5
- i. Level of customer satisfaction U 1 2 3 4 5
- j. An OJT program U 1 2 3 4 5
- k. A safety program U 1 2 3 4 5
- l. Quality of MMAA U 1 2 3 4 5
- m. Quality of messmen U 1 2 3 4 5

9. How much better or worse would it be to place A School students, with their instructors as supervisors, in an actual galley

A. Instead of the present school laboratory

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—

B. In addition to the present school laboratory.

Much Better	Better	A Bit Better	About the Same	A Bit Worse	Worse	Much Worse
—	—	—	—	—	—	—

10. Using the new scale below, please rate each of the same factors you rated earlier, this time, however, in terms of **how good or bad they actually are**, in general, in the fleet. Please circle the appropriate number for each factor. The new words that go with the numbers are:

1	2	3	4	5	6	7
Very Bad	Bad	Slightly Bad	Neither Bad nor Good	Slightly Good	Good	Very Good

- a. The condition of equipment or utensils 1 2 3 4 5 6 7
- b. Food service officer experience or education 1 2 3 4 5 6 7
- c. Sanitary conditions in the galley and dining area 1 2 3 4 5 6 7
- d. The skill level of cooks 1 2 3 4 5 6 7
- e. Leadership of middle level and senior MS's 1 2 3 4 5 6 7
- f. Support and cooperation of fellow MS's on board 1 2 3 4 5 6 7
- g. Interest and support of the Commanding Officer 1 2 3 4 5 6 7
- h. Interest and support of the Supply Officer 1 2 3 4 5 6 7
- i. Level of customer satisfaction 1 2 3 4 5 6 7
- j. An OJT program 1 2 3 4 5 6 7
- k. A safety program 1 2 3 4 5 6 7
- l. Quality of MMAA 1 2 3 4 5 6 7
- m. Quality of messmen 1 2 3 4 5 6 7

С КОМПАНИЕЙ

С. МАСТЕРСТВО ПОСТРОЕНИЯ СООБЩЕСТВА

Поговорим о том, как вы можете выстроить мастерство А для вашего поездка в Штаты. А также поговорим о том, каким образом вы можете выстроить мастерство А для того, чтобы у вас есть то, что вы хотите.

Существует много вещей, о которых вы можете поговорить с мастером А. Их можно выстроить, чтобы у вас есть то, что вы хотите. А также вы можете выстроить мастерство А для того, чтобы у вас есть то, что вы хотите.

Существует много вещей, о которых вы можете поговорить с мастером А. Их можно выстроить, чтобы у вас есть то, что вы хотите.

APPENDIX I

ЧАСТЬ 2. МАСТЕРСТВО А. **FOOD MANAGEMENT TEAM INTERVIEW -- 2**

Существует много вещей, о которых вы можете поговорить с мастером А. Их можно выстроить, чтобы у вас есть то, что вы хотите.

Существует много вещей, о которых вы можете поговорить с мастером А. Их можно выстроить, чтобы у вас есть то, что вы хотите.

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NATICK DEVELOPMENT CENTER

APPENDIX I

FOOD MANAGEMENT TEAM INTERVIEW -- 2

1. Based on what the A School graduate does in his job in the first year after graduation, are there any areas you feel should be eliminated from or taught less in A School?
2. Are there any areas A School should add or spend more time teaching?
3. For each of the following would you tell me whether you feel more training in A School would be relevant, based again on the work graduates will be doing? (Only ask those not mentioned above).
 - a. cake decorating
 - b. customer relations
 - c. record keeping
 - d. preventive maintenance
 - e. menu planning
4. If you were a supervisor in the fleet, would you prefer an A graduate with a few months experience, or a volunteer off the deck force with a few months experience? Why?
5. Many A School graduates and students, as well as school instructors say that A School training in sanitation is good, yet several supervisors in the fleet say this is perhaps the weakest area of the average A School graduate. Do you have any idea why this apparent difference?
6. Based on what the C Food Production School graduate does in his job, are there any areas you feel should be eliminated from or taught less in the school?
7. Are there any areas C Food Production School should add or spend more time teaching?
8. Again, for each of the following would you tell me whether you feel more training in C Food Production School would be relevant based on what graduates do in the fleet? (Again, only ask those not given above)
 - a. cake decorating
 - b. baking
 - c. customer relations
 - d. record keeping
 - e. preventive maintenance
 - f. how to give OJT
 - g. watch leadership
9. A few sources have pinpointed the watch captain or middle management level to be a major problem. Do you agree? If so, how would you suggest dealing with the problem?
10. Based on what the C Management School graduate does in this job, are there any areas you feel should be eliminated from or taught less in the school?
11. Are there any areas C Management School should add or spend more time teaching?

12. In your opinion, what are the major reasons for a lack of or poor OJT programs in the fleet?
13. Would a course for Messdeck Master at Arms be worthwhile? If so, how long should it be?
14. Several MS's we surveyed expressed a strong interest in taking Navy short courses in food service. Do you think this is a good idea? If so, how would you suggest conducting them? (If they don't volunteer it, probe concerning the possibility of 1 or 2 week courses at fleet schools in major ports and/or FMT's conducting short courses).
15. A suggestion has been made to have a 3- or 6-month follow-up visit as part of your FMT assistance visit. In other words, either 3 or 6 months (approximately) after your regular assistance visit, you would have a one-day return visit to check on the ship's progress. When a ship requests an assistance visit from a team it would automatically include this return follow-up visit. Do you think this is a useful idea? What is good or bad about it? (If like the idea) Should the follow-up be in the 3-month, 6-month, or some other time frame?
16. Some consideration has been given to developing individual instruction packages for the food service school (i.e., cassettes for Super 8 movies, booklets, etc. that can be studied by an individual). Would such packages be useful on your assistance visits?
17. The school laboratory equipment is smaller than the galley equipment used in the fleet. Would using full-size equipment in the laboratory make any difference in the quality of the training?
18. In the current laboratory situation at the school, the student is trained in a 5- or 6-man group at a given piece of equipment. Do you feel that this is better than having each person work on his own at a piece of equipment? Why? (If S prefers individual on his own) Can you think of any way to accomplish this in the present school framework?
19. PROBE ABOUT Q's 7 and 9 in the other part of the interview.

For Q 7) (Only if S responds on "more" side) How much more time should a student spend in the cooking laboratory? Assuming total course time couldn't be increased, what area or areas would you take time from -- or would you say that under those conditions laboratory time would have to remain the same as it is now?

For Q 9) (For both parts A & B if S responds either on the "better" or "worse" side) Why is placing students in an actual galley better/worse?

(If "better" in either part of question) How long should the time in the actual galley be?

20. Does the Navy have enough . . .
A School graduates at the E-3, 4 level? How many more or less needed?
C Food Production graduates at mid-levels? How many more or less needed?
C Management graduates at senior levels? How many more or less needed?

21. In your opinion, what is the major problem in the fleet that training should be concerned with?

22. Opinion of FMT feedback form.

ARMED FORCES
COMBINED COMMAND
HEADQUARTERS

DEFENSE ATTACHE
U.S. EMBASSY, LIMA, PERU

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY
DDO-314

